THE

AMERICAN FARMER,

AND

SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
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WORK FOR AUGUST.

Before we commence our details of the work for the month, we will seize the opportunity to make a few desultory remarks on the crops of the season and the prospect of markets.

The Grain Crops of Europe.—So far as we have been able to form an opinion by the European news, we are inclined to believe that the crops in Europe will turn out fully average ones,—so that, should no disasters occur to blight the prospects in that region, our market there for our surplus breadstuffs during the next twelve months will be a circumscribed one. *England*, whether her crops prove fruitful or otherwise, always has to draw a portion of her bread from abroad, dealing, of course, with that nation which may offer her the greatest facilities as regards cheapness and supply, for her merchants, like the government, are ruled by matters of interest. If then, we could supply the demand which may be necessary to meet the deficiency, upon better and cheaper terms than the grain growers of *Canada*, and those of the *Black* and *Baltic* seas, we of course would get the preference, solely, because the great lever of human action—interest—would preponderate in our favor. So far, however, as England may be able to draw a portion of her *deficiency* from Canada, she will do so, as the discriminating duties in favor of her colonial subjects will enable them to furnish it to the best advantage—but as Canada cannot supply but a portion of the breadstuffs needed to meet the demand, the competition for the residue will be between us and the grain-growers of the two seas we have named,—and the greater proximity of the latter over us, and the cheapness of labor there, would reduce our chances within a very small compass, if it were not that from the advantages of climate our crops mature much earlier than theirs, and from the fact, too, that our wheat makes more bread than theirs. But taking all things into consideration, we fear very much, that, should the present disturbed condition of the people of Europe be succeeded soon by a state of quiet and peace, that the demand for our breadstuffs in that quarter, *with the exception of Corn*, will be less than usual, and so believing, we feel it to be our duty to apprise our agricultural friends thus early, in order that they may avail themselves of every opportunity of getting their surplus products to market whenever prices may be such as to justify their doing so.

Crops at Home.—From all the information we can gain, we believe that the *Wheat* crop is above an average yield, while its quality is excellent. The *Tobacco* crop will, we think, prove *unusually small*, but then, the stock on hand in Europe, is said to be equal to eighteen months' supply. The *Rye* crop this year has been a fruitful one, so also has been that of *Barley*. The *Oats* crop has suffered much from drought in all quarters, and will be, we believe, less than an average one. The *Corn*, too, in many parts of the country has suffered from the same cause, as well as from insects, but now begins to look more promising—how its yield may ultimately turn out, we are not prepared to say, but trust that, in *product*, *price* and *markets*, the growers of it may find ample rewards for their labors. The Hay crop is a fair one.

Now let us turn to such matters as require to be done

ON THE FARM.

Timothy.—Grounds intended to be set in Timothy meadows *should be forthwith ploughed—being first heavily manured.* He who intends setting a timothy meadow should recollect, that it is to remain in grass for many years—and, as the custom is,—but ought not to be,—to take all out of the soil, without returning anything to it, it is indispensably necessary that it be highly fertilized in the beginning, and that, if it be not, short crops of grass, and an early running out of the meadow, will be the inevitable consequences. In ploughing, care must be taken to turn over the furrows flat, so as to completely bury grass, weeds,

and the seeds of both, while the furrow should be of sufficient depth to place such nuisances in a condition to prevent their re-growth or germination. Care must be observed to have no *balks*, but to do the work with exactitude. When ploughed, if the soil be stiff, the roller should be used across the furrows, to close up interstices and break and pulverize the clods. Then the harrow should be run the way the furrow runs, after which it should be cross-harrowed. There is possibly no crop which requires nicer tilth than does that of timothy. The smallness and delicacy of the seed will indicate this to any one who may take the trouble to think; and hence, every pains should be taken to render the soil free from clods and lumps of earth. Many a lot of *good* seed has been denounced as *bad*, because it did not come up, when, in fact, the fault lied in the slovenly manner in which the ground had been prepared.

Where the ground may have been long in culture, *without being recently limed*, the presumption is, that the soil is *deficient in lime*, and it would be best to give it 50 or 100 bushels to the acre previous to the last harrowing. If, however, the ground is *wet*, the application will be almost useless, and it should be relieved of its superabundant water by drainage.—Having prepared your soil, as directed, employ a *good seeder*, and let him carefully sow your seed, which, when sown, must be harrowed or brushed in; that done, the ground should be *rolled*. This latter operation brings the earth into immediate contact with the seed and ensures its quick germination, and the vigorous growth of the plants.

Quantity of Seed per Acre.—Less than a peck of seed, per acre, should not be sown, and care must be taken in its purchase, in order that it be *fresh* and *well* cleaned. In setting a meadow it is necessary to sow plenty of *seed*, in order that the ground may be occupied by the grass plants and the less room left for weeds.

Rye.—The *earlier* you get your Rye in this month, the better opportunity will it have of establishing itself with roots to enable it to withstand the pressure of frosts and thaws—the better will its chance be of escaping from the effects of winter-killing.

In ploughing, be sure to turn up the soil as deeply as your team will allow you—and be as sure to make the tilth perfectly fine by the free use of the harrow. After your seed is in the ground, harrow and roll the surface.

Quantity of seed per acre.—The quantity of seed per acre usually seeded, is 4 pecks. We think 5 pecks the safer quantity.

If the land on which you are about to sow your Rye should not be in good heart, you would find it to be your interest to sow broadcast over each acre of it, a mixture of 5 bushels of ashes and 1 of plaster. If it be possible for you to do so, it would be better to sow on each acre, and *plough it in*, a mixture composed of 200 lbs. of *Peruvian Guano and* 1 *bushel of Plaster.*

Turnips.—If you have not sowed your Turnips, you may still put them in any time between this and the 10th of the month, the earlier the better: for the mode of doing so we refer you to our instructions of last month, in which you will find everything laid down calculated to ensure success. As our paper circulates in many parts of the country where *coal* is used as fuel, we will mention, that if 20 bushels of coal ashes and 5 gallons of fish oil be added to the manure usually applied to turnips, the *safety* and *quantity* of the product will be greatly enhanced.

Guano.—As the time for seeding *wheat* is at hand, we seize the occasion to say that this manure is peculiarly adapted to the growth of this crop, and that all who can do so, should procure a *supply*. Where a single crop may be the object, 200 lbs. per acre, will be enough—where permanent improvement of the soil is looked to—as it ought always to be—400 lbs., per acre, will be necessary. Whether one quantity or the other be used, a bushel of plaster should be mixed with either. *Guano should always be ploughed in to the full depth of the furrow, be that what it may.* And to save the necessity for inquiry, we will remark, that when mixed with plaster and ploughed in, it matters not how recently the land may have been limed:—nor will it at all interfere with the effective operation of the *Guano*, if liming be performed at the same time, provided the *lime* be applied to the surface of the soil, and the former ploughed in. For our reasons in favor of ploughing Guano in, see vol. 3, page 60.

The inquiry is frequently made of us, as to the propriety of top-dressing with Guano, and to cover that inquiry the more comprehensively, we will make the remark, here—that from the *volatile* nature of the *nutrient* principle contained in Guano, it should never be applied to the surface, as much of its virtue, when thus applied, escapes, and its benefits are, to that extent, lost alike to the soil, and to the growing crop. If used at all as a *top-dressing*, it should be so used in a liquid form—say 10 gallons of *rain-water* mixed with *every pound* of the Guano.—The rain-water would give *temporary* fixidity to the already formed ammonia of the Guano, and thereby, *for a time*, prevent loss, but as the action of the solution would be but for a very limited period, and the *full benefit* of the manure is desirable, we *repeat*,—Guano should always be ploughed in, as to place it beneath the earth, is the only possible way by which its greatest amount of benefit can be secured to the soil. Among the minor operations of the garden it may be well enough to use solutions of Guano upon the vegetables and flowers, but even there it would be best to work it into the earth.

Granaries and Barns.—These should be thoroughly cleansed before grain is stowed away in them. The floors should be scoured with ley and the walls whitewashed. It would be better that means be

taken to destroy rats before the grain is put in them.

Poultry Houses.—Have these well cleaned out—remove all the hay or straw from the nests, have them scalded with ley, and after being dried in the sun, furnish them with new straw—then whitewash the houses inside and out.

Potatoes.—If you have not done so already, give to your late potatoes their last working.

Thrashing Grain.—Have this done as speedily as possible, and send your surplus grain forward to market,—for, after much thought upon the subject, we can see nothing in the aspect of affairs to justify the belief that anything is to be gained by delay.

Draining and Ditching.—This is a favorable period for these operations, and as healthful vegetation *cannot* be carried on in *wet* soils, it is the interest of every farmer and planter to drain all such lands on his estate.

Stubble-fields and Pastures.—Give to these a dressing of plaster, say, 1 bushel to each acre.

Fences.—Make a careful examination of your corn field and other fences, and make all necessary repairs. Weak points in a fence serve to tempt stock to trespass on growing crops at all times, but especially so in this month, when the pastures begin to fail, and hunger sharpens both their sight and appetites.

Ploughing for Wheat.—As the period is approaching for seeding wheat, and it should be the pride of every farmer to be ahead of his work, you should at once set about breaking up your wheat ground, and making all other necessary arrangements to get your wheat seeded early, as in so doing you will assuredly consult your interest.

In ploughing your ground be sure to do it thoroughly and well—from 6 to 8 inches deep, and see that it is made as fine as roller and harrow can make it, as the more perfect the degree of pulverization to which you bring it, the better chance will the wheat plants have to thrive and bring forth their fruit.

As most farmers will be getting in their wheat next month, we embrace the opportunity of calling their attention to the subject of using the drilling machine in seeding. Its advantages are said to be

1. An increase of yield, arising from its superior facilities of growing and from its exemption from winter-killing.

2. A saving of ⅓ths the quantity of seed.

3. A protection, to a certain extent, against the *rust*, that deadly blighter of the wheat-growers' hopes. Those who claim for it this virtue, contend that, in consequence of the free admission of air through the rows of wheat, it derives exemption from this disease.

4. An exemption from winter-killing, by means of the furrow raised by the machine affording protection to the roots of the plants, *first*, by aiding in carrying off the water,—*secondly*, by encouraging a more vigorous growth and a greater ability to resist the uprooting action produced by the thawing of the earth, and, *thirdly*, in the event of the plants being thrown out, they are covered again by the earth of the ridges which crumble down and cover their roots.

The machine we should think cannot be advantageously used, except where the ground is thoroughly prepared.

These are some of the advantages urged in favor of the use of the drilling machine, and, if founded in truth, should be conclusive, as the *saving* of seed on a large field of wheat, would, alone, more than cover its cost, to say nothing of the other benefits ascribed to this mode of seeding.

From personal inspection of many fields of wheat put in in this way, last fall, in York and Lancaster Counties, Pa., we are disposed to think favorably of it, but as we are always cautious in recommending expenditures, we shall do nothing more at the present time, than to lay the matter before our readers, leaving their action in the premises to their own good judgments.

Bushes, Briars, Sprouts and Weeds.—These should be all cut up during this month, it being the best time to effectually destroy them. When cut up they should be put in piles, dried and burnt.

Sheep.—In the pasture or sheep-walk, in which these may be kept, there should be provided, under cover, a trough, which should be, twice a week, provided with tar or salt—the tar to be first spread on the bottom of the trough and the salt sprinkled over the top of it.

Fallowing for Fall Crops.—It is full time that this work was begun—when done, it should be well done. The ploughing should be done as deeply as a strong team can force the plough; when the *soil* is stiff, after being broken up it should be rolled crosswise and thoroughly harrowed, as too fine a tilth cannot well be given to it. We hold, that too much pains cannot well be taken in the preparation of the earth, as to ensure a good crop it is indispensably necessary that it be put in the very best possible condition to receive the seed, admit the percolation of the rain, and give free access to the air. We believe that land which is put in such tilth, will yield one-third more than lands of equal quality that may be indifferently ploughed and pulverized.

Milch Cows and 2 year old Heifers.—These should now be served with the bull,—in selecting a bull be sure to obtain the services of a thorough-bred Durham, Devon, Hereford or Ayrshire, and thus at a moderate expense bring up the blood of your dairy stock.

Late Corn.—If your *late* Corn has not already received the last working, pass the cultivator through it and lay it by in a state of cleanliness.

Cow and Barn Yards and Hog Pens.—Supply these with materials to be converted into manure by your stock. Earth, mould, marsh mud, woods-leaves, pine shatters and mould, weeds, peat, the scrapings of

fence corners, head-lands, yards and ditches, if collected and spread over these places will be converted into excellent manure. Recollect that without manure you cannot keep up the fertility of your soil; and that, without you do, your crops will be short; and recollecting these things, make it a point of pleasure as well as duty to see that no opportunity is lost to accumulate materials from every possible resource within your reach. By pursuing a course of proper industry, there is no one who owns a farm but may obtain in a few months a sufficiency of good manure to fertilize all his corn, potato and turnip grounds, and thereby in a series of four years to go over his entire farm, and thus keep it up to that state of fertility which ensures profit and vouchsafes pleasure—for pleasure ever attends well rewarded toils.

Orchards.—Examine your orchards for cankered or decayed limbs,—cut all such off down into the sound wood, smooth off the surface of the wound, and apply to it a plaster made of 1 part tar and 3 parts plaster—or one made of equal parts of bees-wax, tallow and turpentine.

If there be any of your trees on which the bark is rough and scabby, have such bark scraped off and paint the trunk with a mixture comprised in the proportion of *1 gallon of soft soap, 1 lb. flour sulphur, and 1 pint of salt.* By these processes you will ensure new and healthful bark to your trees, destroy the eggs of many destructive insects, and greatly improve the appearance as well as the bearing capacity of your orchard, provided you occasionally manure it.

IMPROVEMENT OF LANDS IN NORTHAMPTON COUNTY, VIRGINIA.

It looks so like empiricism for one who has no personal knowledge of the locale of a district of country, its soil and climate, to attempt to prescribe a system of culture for its intelligent inhabitants, that we should have shrunk from the task, had we not been encouraged by the lights which one of its gifted sons threw upon our path in our last number, and had he not made the request that we should do so. But from the description which he has so graphically given of the soil—the resources for the accumulation of manure which the farmers possess, as well from the waters as from the land—from the description which he has given of the system of culture, the products resulting therefrom, and the indomitable industry displayed by the farmers of Northampton county, Va., we are sanguine in our belief, that a better system can be adopted than the one now pursued, and that, if adopted, the same industry, intelligence, and perseverance, if persisted in, would crown their efforts with rewards infinitely better suited to the generous spirit which is disclosed by the admirable paper of our thrice valued correspondent—as we believe, in the sincerity of our heart, that the same enterprise and skill, which has been so honorably evinced in their present culture, could not fail to enhance the value of their kind soil, and increase its products at the end of one course of the rotation of crops which we shall recommend, at least two hundred per cent. This promise at the first blush may appear to be based on deductions drawn by a mind influenced by an over sanguine temperament—but it is not the case; for we have endeavored to take a calm and collected, and at the same time, a comprehensive view of the whole ground—to weigh well all those considerations of soil and climate which should have weight, in arriving at proper conclusions,—and, consequently, the opinions which we may advance, will be the results of the best judgments at which our mind is capable of arriving—opinions formed under the desire of serving a noble, generous, and high minded people, for whom, though we be a stranger to them, all our feelings are warmly interested, and of whom the only requests we have to make, are, that, should *they* not accord with the views which we shall take, they may at least, give us credit for purity of motive, and an honest, disinterested desire to serve them. We may be mistaken, for it is incident to man to err, and we, among the rest, are liable to the same general law which subjects human nature to its operations, but if we should err, we shall have the consciousness to know that the heart will not be to blame.

Predicating our system of *division, ploughing, preparation of the soil,* and *rotation of crops,* upon the description given of the character of the lands as comprised within the county by our correspondent, "*Northampton,*" we should say:

1. That, in general, we would recommend that the *four* field system should be adopted upon all farms where the *wet* clays of which he speaks may not occur.

2. That, where those wet clays may occupy only about a *fifth* part of a farm, we would recommend the *five* field system to be adopted, and that, after liming and manuring, we would set the *fifth* field in *timothy*, or *red-top grass*, and devote that field to the purposes of hay and pasture. But such *wet* clays may, by drainage, be converted into soils adapted to the general purpose of tillage, in the regular course of a rotation of crops. We wish no better proof of the tangibleness of this proposition, than is afforded by the result of the labors of Col. *Capron*, in reclaiming the marsh on his estate, an account of which we gave in the *number of our journal last month*—a result as honorable to the intelligence and enterprise of that gentleman, as it will prove profitable to him in a pecuniary point of view; for he has converted a field of sixty acres, which, prior to its being drained, was an unsightly morass, growing nothing but sour, coarse grasses, into a beautiful meadow, sufficiently dry for every purpose of culture. His field, by its formation and inclination, re-

quired the *main open drain* to be cut through the centre, the lateral covered ones, diverging from various elevations and points, were conducted into this, and formed a series of conduits which relieved the entire surface soil of all superabundant water.

But where a *wet* field may be *flat* or nearly so, the main ditches should be cut around their margins, as well as through the centre, of sufficient depths to receive the water from the lateral ones, the which should be of sufficient depths, when covered, so as not to interfere with the operation of ploughing—say so deep as to be 12 inches beneath the surface,—this would give 12 inches above the cover of the drains, and thus secure them from molestation by the plough. As we stated in our description of them, Col. Capron's *lateral covered drains* are made of bricks—where, however, bricks are not easy of procurement, very good materials may be found in *pine* poles of a few inches in diameter, laid lengthwise on either side of the ditch, to be covered by similar poles, of *sufficient width*, to be laid on the top thereof; upon the top of these covering poles, twigs of *pine, cypress*, or any other evergreen wood, or even *straw* or marsh grass, may be placed, to prevent the earth from falling into the drain, until it shall have become consolidated:—or a very good drain may be made with pine, or other *boards*, of equal width, placed along either side of the ditches, inclining to the centre, forming an angle of about 45 degrees, to be filled up on both sides and on top with the earth excavated from the ditches. Covered drains, made in either of the two latter ways, would last from 25 to 30 years, or more, and serve to vent the water during that period of time, so as to convert into dry, friable lands, such soils as had heretofore been too wet for healthful vegetation. Nothing is more certain than that lands which are always super-saturated with water, are unfit for the purposes of profitable culture. And here the occasion is a proper one for us to make the observation, that clays which are in that condition must be drained before they can be said to be adapted to agricultural purposes, as neither mineral, animal, nor vegetable manures, can act efficiently while soils may be in that state,—the *excess of moisture*, so far as the mineral manures, as lime and ashes, may be concerned, prevents that thorough incorporation with the soil, so necessary to a disintegration of the particles of clay, as well as to the admission of air—while its action upon *nutritive manures* would operate to depress the temperature of the earth so as to arrest decomposition, and, consequently, to prevent such manures from furnishing the desired amount of food for the growing plants.

3. Our correspondent pays a well merited compliment to the farmers of Northampton, when he says:

"I hazard the assertion that few people can be found, climate, soil, and system, taken into the account, who could successfully accomplish what they do,"—for their industry in the collection and application of manure is no less astonishing than commendable,—and we feel assured, that, if the same unconquerable industry were to be brought to the aid of a different system of culture—to wit, to the *four field* system, that their lands would, in the course of a single rotation of crops, present such a state of improvement as to increase their tillable value three hundred per cent. We say this notwithstanding the "*failure*" of the late Dr. Parker, who, as our correspondent states,—"after dividing his land first into *four* fields, and finding that did not answer, came to *three*, and, finally, to the common plan at which he continued during the remainder of his life." Our correspondent remarks, that he is not acquainted with the details of Dr. B's plan—neither are we,—and, therefore, shall not speculate upon it, but shall content ourself with the general remark, that in all improved systems of culture, *it is of vital importance to their success, that we begin right*, as without the foundation be properly laid, the superstructure built thereon, must, for want of support, fall to the ground—nor do we think that the "*failure*" of Dr. P. should deter others from making an effort to bring up the average yield of corn of *Northampton County*, from 2, its *present* average, to 6 or 8 barrels, an *average* which we believe to be entirely practicable within five years, if the plan which we shall lay down shall be strictly followed. The numerous creeks and arms of the bay with which the county is indented, afford, we are very certain, ample supplies of the most enriching manures, as sea-weed, marl, oyster shells for lime, marsh mud, the scrapings of ditches, the mould from fence-rows, mould and leaves, pine shatters, &c., the which, if collected with the same industry and intelligence *as now*, would, under the changed system which we shall propose, permanently fructify the soil, and make its productive powers all that the most sanguine could desire. But before any sensible melioration can reasonably be expected, there are two important operations to be performed, viz: *the draining of the "wet clays," and an increased depth of tilth, by ploughing*,—NO SOIL SATURATED WITH WATER CAN BE MADE PRODUCTIVE UNTIL RELIEVED OF ITS OVER-CHARGED QUANTUM OF WATER,—WHILE NO LAND PLOUGHED ONLY TO THE DEPTH OF 3 OR 4 INCHES CAN DO JUSTICE TO ITSELF, OR RENDER A YIELD IN SUCH A MEASURE AS TO ASSURE REMUNERATION AND PROFIT.

4. Our correspondent says:

"The soil is generally a *light sand* on a clay subsoil. Occasionally the clay comes to the surface, and is then regarded as of an inferior quality, being *wet*, uncertain, and difficult to work."

Now we say, *drain* such soils as above described, in the course of the approaching autumn—when drained, plough to the depth of 6 or 8 inches, so as to turn up 2 or 3 inches of the clay, apply 50 bushels of freshly slacked *lime* to the acre, or from 150 to 200 bushels of marl, spread it evenly over the

surface, and let it remain until the usual time for working in the ensuing year, then harrow and apply the manure usually given to the corn crop, cross plough that in, 4 inches deep, check and plant the corn, and we shall be very much at fault in our calculation, if the product of corn is not one hundred per cent. greater than it has ever before been. At the usual time for seeding wheat in autumn, say from the 10th of September to the 1st of October, seed the corn-field down in wheat, and early in the February following sow thereon, 1 bushel of Clover seed to every 5 acres—let the Clover remain untrodden upon by beasts of any kind after the wheat shall be cut off, during the first season. This crop of clover the second year may be cut twice, and once the third year, the after-math or second crop of that year to be ploughed in, preparatory to the crop of the succeeding year. If put in corn, the usual manure must be applied upon the top of the clover-ley, before being ploughed under. At this ploughing, a depth of 8 inches must be reached, so as to afford ample pasture for the roots of the plants to expand themselves in, to take up their food, as well as to be protected from the rays of the sun, and in order that a healthful degree of moisture may be obtained. The cross ploughing herein recommended, will mix the sand of the *surface* with the clay of the subsoil, and make, even the first year, a comparatively good mould or loam—a soil of all others the best adapted to general culture, all things considered. By mingling the surface sands with the stiff clays, which are complained of, as being "*wet, uncertain and difficult to work,*"—after they shall have been drained, —a most admirable, friable soil will be produced, for even the *stiffest wet clays*, cease to be so, when relieved of their superabundance of *water*,—water in excess being the element which gives to them the consistence of *mortar*, and which renders them so "uncertain" in their yields, and "*difficult to work.*" The admixture of sand with a *sound dry soil*, separates the argillaceous particles, admits the air into the earth, promotes the decomposition of all freshly applied animal and vegetable manures, while the lime causes the decomposition of the vegetable remains to go on with a greatly accelerated speed, and renders many substances not theretofore so, available as food for plants. As an auxiliary means of improvement, each acre which may be in clover should have a bushel of plaster sown thereon, annually, *early* in the month of February.

An opinion prevails that where lands lie contiguous to salt water, that plaster is inoperative. For ourself, we have no faith in this opinion, but look upon it as erroneous, believing that, if a sufficiency of plaster is not already present in the soil, it will act just as potently, just as efficiently, in the vicinage of salt water, as in any other location. Now, pray, what is there in the composition of Plaster to prevent its action near salt water? Why, nothing. It consists chiefly of lime and sulphuric acid. Lime, we all do know, will act favorably on any soil, situated anywhere, where it does not pre-exist in sufficient quantity; and, as the office of the *sulphuric acid* is that of attracting nitrogenous bodies from surrounding objects, there is no reason why it cannot perform this office as well in one locality as in another.

5. Having accomplished the melioration of one field, as suggested, proceed on to improve each of the others, until the improvement of all shall have been accomplished.

6. Where the soils may *not* be wet, the necessity for draining will not exist. But if the clay which forms the subsoil is within reach of the plough, *two* or three inches of the clay should be turned up, and the field treated as we have recommended for the drained lands. By such treatment, all the fields will have experienced the benefit of improvement in the course of five years, and be in a condition adapted to any kind of culture to which they may be appropriated, that may not be forbidden by the climate. Each field, as it may come into clover, should receive a dressing of fifty bushels more lime, or 200 bushels of marl, when its melioration may be regarded as comparatively permanent, provided the same pains be taken, as is now practiced, to furnish the corn crop with nutritive manures, as the land will not require liming again for fourteen years.

We think it highly probable, that in the virgin clay which may be turned up there will be a sufficiency of potash present to combine with and dissolve the sand, and furnish the requisite quantum of the silicate of potash to form the outer crusts of the corn stalks. But to make assurance doubly sure, it may be well to manure the corn in the hill with *five* bushels of ashes, *ten* of mould, and *one* of plaster, per acre; or to mix that quantity of such compost, per acre, with the manure, before it is applied broadcast to the land, prior to the cross-ploughing which we have recommended.

We desire to impress upon the minds of farmers, that, prior to the application of the manure, the ground must be *harrowed*, in order to mix the sand and clay together with the greater certainty; and that, after the second ploughing, the operation of harrowing must be repeated; after which, the ground must be *rolled* before being checked off for planting. *They may be assured, that much of the success of a corn crop depends upon the thorough preparation of the soil before it may be planted.*

7. *Mode and Times of Working the Corn.*—Our correspondent upon these subjects has these remarks:

"This crop (Corn) is worked both with the plough and the cultivator, on an average *seven* times in the course of the year—that the cultivator is chiefly used to level the ground for the succeeding crop of oats—that the plough is usually used five times."

Now, there is no stronger advocate for the thorough working of corn than ourself. So strongly fixed are we in the efficacy of keeping the soil of a corn field free from weeds, and always open to the

action of the atmosphere and rain, that, in a field of fifty acres, we should have the *cultivator* almost continually in it after the first working, (which should be with the plough) until we laid the crop by. We should, however, never work corn in *sandy land* more than once with the plough, and that the first time; *and we should so graduate its depth, as not to tear up the roots of the corn, nor disturb the manure ploughed in.* We look upon it, that every time the manure is ploughed up and exposed to the action of the sun and air, that a *loss*, equivalent to one-fifth part of the *nutritive* or *volatile* portion of the manure, is sustained; so that *five* ploughings would well nigh deprive such manure of its most valuable constituents, and leave the stalks of corn without the substance principally needed to form the grain. This is our view of this part of the subject of corn-growing; and hence, in part, our preference for the use of the *cultivator*, instead of the plough, in the culture of corn. Our other objection arises from the aversion we have to the laceration of the roots of the corn plant, after it has grown to any considerable size, *believing that all the feeders formed by nature are necessary to its perfection;* and that if the roots had not been essential to the performance of various functions, they never would have been given to the corn plant. However necessary the plough may be in the working of corn in stiff, clay lands, we do not, as we have before remarked, after the first working, consider it at all necessary in sands and sandy loams. On the contrary, in such soils as our correspondent describes, we hold, that the frequent use of the plough, as described by him, can exert none other than a pernicious effect—*first*, by tearing up the roots of the plants, and thus depriving them of the ability to take up and digest their food; and, *secondly*, by causing a loss of the nutrient principle of the manure before the plants have time to mature their fruit. Hence, it will be perceived, that our belief is, that, in a measure, the *implement used, and the frequency of its use*, has despoiled the farmers of Northampton of a very large portion of their products. If we add *shallow ploughing* to those before named, we have, to a considerable extent, the causes which have operated to lessen them.

In connection with this branch of the subject, we may remark, *that they should annually increase their depth of ploughing* at least two inches, until they shall have got a depth of tilth of at least ten inches. By *liming* the *clay*, which may be periodically turned-up, all that is injurious in the inverted bodies of the *till*, will not only be neutralized and rendered harmless, but be converted into mineral manures. Common sense and reason, in view of the fact that the tap-root of corn has been known to penetrate the earth four feet, and even more—we say, in view of this fact, common sense and reason have taught us to believe, that he who desires to grow a large crop of corn, must give the plants a deep and fertile bed to grow in, as the less obstruction the roots meet with in their descent in search of food, the more vigorous will be their growth—the more abundant their yield—and the same principle will govern in respect to the growth of most other plants. *Deep tilth is a protection alike against excess of rain, as well as of drought.* This proposition appears to us to be consonant with common sense, with reason, and with vegetable physiology. As the converse of deep tilth, let us take the depth of ploughing as executed in Northampton. Our correspondent represents it to be from 3 to 4 inches. This is shallow enough, in all conscience—too shallow for healthful vegetation to be successfully carried on any where, and particularly is it so in the climate of Northampton county. The manure turned in to that depth, is not protected in the least from the intense heat of the sun, but is continually under its most baneful action—we say baneful, because, from the continuous degree of excessive heat which is kept up, the decomposition of the manure is carried on so rapidly, that the *food* which is thereby eliminated, instead of being taken up by the roots of the plants, to contribute to their growth, and to the elaboration and perfection of their fruits, is forced up through the pores of the earth, escapes, and is wasted on the air. This is undeniably true; because the supply is provided faster than the plants can partake of it. Again, owing to the same causes, the *rain* which falls has not a chance of performing its rightful—its refreshing office. It is able to percolate through the earth but some three or four inches, where it comes in contact with the *hard pan*, remains stationary, and is so rapidly dried up by the sun as to be incapable of fulfilling its mission; for, until re-absorbed by the over-heated superincumbent atmosphere, it remains in position only to injure, instead of benefitting the plants, through the scalding temperature to which it has been raised by the influences to which we have alluded. How different would be the action of rain falling on a tilth 8 inches deep, can very readily be imagined. At that depth, its *position* is removed beyond the over-heating action of the sun's rays—it remains there to do good, encourage the growth of the plants, and perfect the formation of their fruits, whether these be made above or beneath the earth; for the temperature of the over-laying soil is just at that point which conduces to the gradual decomposition both of the rain water and the manure which lie in juxta position. As the decomposition of these bodies go on thus moderately, the gaseous food is provided so timely, and in such appropriate quantities, that the spongeoles and roots of the growing crops are competent to take them up and apply them to their uses, as formed, without loss or waste.

8. We shall now proceed to lay down a course of culture, or *rotation of crops*, for two series of 4 years each; which is based upon the supposition

that one of the 4 fields will be successfully limed or marled, annually—that is, that at the end of the first series, the entire four fields will have been either limed, ashed, or marled.

ROTATION OF CROPS—FIRST SERIES.

Fields.	1st year.	2d year.	3d year.	4th year.
No. 1	Corn	Wheat	Clover	Clover
" 2	Oats	Corn	Wheat	Oats
" 3	Rye	Corn	Wheat	Clover
" 4*	Wheat	Clover	Clover	Corn

SECOND SERIES.

Fields.	5th year.	6th year.	7th year.	8th year.
No. 1	Corn	Wheat	Clover	Corn
" 2	Oats, with manure	Corn	Wheat	Clover
" 3	Clover	Rye	Corn	Oats
" 4	Clover	Clover	Corn	Wheat

9. With regard to the failure of the application of the ashes by an officer of our army, of which our correspondent speaks, we hardly think that sufficient time had elapsed, when he wrote, for any good effects to have manifested themselves. Though the quantity applied per acre, 20 bushels, was small, even that small quantity will operate favorably when sufficient time shall have intervened to produce results. The ashes may, as our correspondent suggests, have had all the potash leached out of them; but their other constituent elements will tell advantageously in time—although, to have given a fair test to their virtues, *a hundred bushels*, per acre, should have been applied. Small as the quantity applied is, we are very certain that the oats whereon they were spread will be better at harvest than that grown on the adjoining lands, unless the soil of the latter shall have been much more fertile in quality. And, by way of encouragement to our estimable correspondent and friend, we would say, that were we about to commence a system of improvement, we would, in addition to the quantity of lime named by us, spread on each acre, as we improved it, an equal quantity of ashes; and should rely upon their virtues to bring back our outlay with compound interest. It should be borne in mind, that this has been a very dry season—one which is peculiarly unfavorable to the application of mineral manures, and that, in consequence of the drought, the oat crop is short, almost every where.

10. Our correspondent says that it is—

The "opinion of experienced farmers" in *Northampton*, "that, owing to the loose texture of soil, or climate, it is impossible to raise, under any system of cultivation, the heavy crops mentioned in the *Farmer* as having been produced on the Eastern Shore of Maryland."

Now, to these despairing farmers of Northampton we would say—*be of good cheer*—HAVE HOPE—for those farmers on the Eastern Shore of Maryland, who make these large crops, PLOUGH DEEP, THOROUGHLY PREPARE THEIR LANDS, and apply *Lime, Marl, Ashes, Guano* and *Bone-dust*, and have, as a matter of course, increased the productive capacity of their lands, some two hundred, and some three hundred, per cent; while it has been the good fortune of Col. *Capron*, by means of his energetic course, to enhance the productiveness of his, in some instances, from 7 to 900 per cent. For ourself, we can see nothing in the difference, either of "soil or climate," between the Eastern Shores of Maryland and Virginia, to produce the difference in product which does exist in favor of the former; and we shrewdly suspect, that the cause of that difference lies altogether in the superiority of our system of culture, and the liberal application of mineral manures.

11. In conclusion, we will illustrate the advantages resulting from mixing sandy soils with clay, by stating a well-attested fact. When the late *Earl of Leicester* (then Mr. Thomas Coke) came into possession of his *Holkham* estate, he found its soil to consist almost entirely of *blowing sands;* and he saw at once, *that unless he improved its texture*, that every prospect of profitable cultivation was hopeless. At great expense, he hauled clay upon his fields, which changed the very *nature* of the soils; and, by adding lime and marl, in a few years he made what was theretofore barren wastes, beautiful fields. What the *Great Commoner* effected in England, its intelligent farmers can effect in Northampton County, Virginia; for we hold it, that American intelligence is equal to that of any people on the earth.

12. There is but one point in the management and collection of the materials for manure to which we find any objection in the account given by our correspondent. We allude to the practice of permitting the corn stalks to remain in the field through the winter, and chopping them off the succeeding spring. They would pay well, as soon as the corn is gathered in the fall, to have them cut up and hauled into the cattle-yard, where the *shucks* could be eaten by the stock, and the stalks themselves be spread over the yard to serve as absorbents of their liquid voidings. The corn stalk is rich in the *silicate of potash*, and would serve the three-fold purpose of absorbing and retaining the ammonia and other salts found in the cattle's urine—of keeping the cattle comparatively dry—and of furnishing silicate of potash to succeeding crops. This latter compound mineral is an important one; and being already formed in corn-stalks, renders it necessary that they should be husbanded, in order that their most valuable constituent be not lost to future cultivation. With this single exception, we see nothing in the plan pursued by the farmers of Northampton, in the accumulation of the materials for making manures, that can be easily improved upon. Their *industry* upon this head, is only equalled by their *sagacity*, and both might be copied with advantage by most of the farmers of whom we have any personal or other knowledge.

*The field in which the wheat may be grown the first year, should receive a moderate dressing of manure, if it be not formed of that portion of the farm on which the corn grew the previous year.

A WORD TO OUR CORRESPONDENT, NORTHAMPTON.—We should be highly gratified if you would make the following experiment, in September next. Appropriate 10 acres of your farm to the growth of *Wheat*. Plough it deep enough to bring to the surface 2 inches of the clay subsoil, and then harrow; on these 10 acres spread 3,000 lbs. of *Peruvian Guano*, then plough it in 4 inches and harrow. This done, sow thereon 20 bushels of wheat, plough it in 3 inches deep, harrow, and finish by rolling—and make to us a report of the yield next autumn. We think we can promise a yield of 20 bushels to the acre—perhaps, more.

If it should not be convenient for our excellent friend, *Northampton*, to put in 10 acres, we would *implore* him to put in 2, and treat it to 800 lbs. of *Guano*, and that he broadcast thereon 200 bushels of ashes or lime, after he shall have seeded and ploughed in his wheat, just before the harrowing and rolling. If he should do so, we believe we may promise that the *increased* product will more than refund his expenditure for Guano and ashes, or lime, besides the advantage of having his *lot* permanently improved and ready for a brag crop of corn the next year, unless he should prefer to set it in clover.

ON THE APPLICATION OF LIME AND BONE DUST.

OAK HILL, July 14th, 1848,
Near Georgetown.

To the Editor of the American Farmer.

DEAR SIR:—I have a field of four acres, which I intend putting in wheat this fall. The field was sown in rye last fall, two acres of it I clovered and top-dressed; these two acres I intend to lime this fall, and apply bone-dust to the other two. I have taken the "American Farmer" since February last, but I have seen nothing as to the time and manner of applying lime—I should like to know whether to apply before or after the first ploughing. The Editor of the "Farmer" will greatly oblige a very young farmer, by giving some information on the subject.

Reply by the Editor of the American Farmer.

We comply with the request of our correspondent with pleasure, and the more so as there may be many "young farmers," like himself, in need of the information which he has sought. But before we proceed to give it, we will remark, that by referring to pages 274, 275 and 310 of vol. 3, he will find the very information which he desires, and that by a general reference to the article "LIME," in the Index he will discover that our last volume was rich in papers connected with the mode of application and benefits of lime. Now to the subject matter of the inquiry.

By the way, it is rather bad husbandry, to grow wheat this fall just after a crop of rye, but as two of the four acres are in clover, it may be risked, especially as the rye was top-dressed, and there will be a good clover-ley to turn under.

Application of Lime.—Lime should, except when spread on an old grass sward, always be applied upon the surface, *after the ground is ploughed.*—if left to itself, it will find its way into the earth by the force of its own specific gravity. In the present case, however, we would slack the lime and harrow it in with the wheat.

The best mode of applying lime is with the corn-crop, *but it is good at any time*, where it may not be already present in the soil in sufficient quantity.

Bone Dust.—As our correspondent intimates it to be his intention to manure his other two acres with bone-dust, we respectfully refer him to the article "*Bone Dust*," in the Index, for any information he may need upon that head. And as it may be possible, that the land to which he intends to apply it, is *poor*, we would advise him to treat the two acres to 40 bushels of bone-dust, and 200 bushels of ashes—to mix the two minerals together well, let them remain in pie about three weeks before using them, taking the precaution to shovel the mass over every few days. After the ground is ploughed and harrowed the mixture should be sown broadcast and harrowed in with the wheat. *Ashes*, like lime, should be applied to the surface, and permitted to find their way into the soil, but, as in the case of the lime, we have suited our advice to the peculiar emergency of the case, believing, under the circumstances, it will be best to harrow them in with the seed wheat—and we will here remark, that the ground should be carefully rolled and *cross-rolled*, as the finishing part of the process, taking care, previously, to make a sufficient number of *water furrows* to carry off rain water, and ensure the wheat a comparatively dry bed during the ensuing winter.

Our correspondent speaks of a "first" ploughing—but we presume, in so speaking, he has no allusion to that part of his lot in clover, as to give that more than one ploughing would be to deprive the soil of much of the benefit of the *clover-ley*, the advantage of such leys being to turn them *under*, in order that they may *rot*, and *make food* for the growing crop.

We presume it is the intention of our correspondent to sow clover seed upon the entire lot next spring, if, however, he may not so intend, we would advise him by all means to do so, as it is the only means by which the permanent improvement of his land can be effected. After remaining two years in clover, he should cultivate it in *corn*, to be followed by wheat and clover.

Quantity of Lime.—A word more as to the *quantity* of lime to be applied to that part of his lot in clover. If the *lay* is a strong, well set one, he may apply 100 bushels to the acre,—if, on the contrary, the clover has not taken well, 50 bushels will be sufficient for the present, an equal quantity to be given when the land shall be put in corn some three years hence.

☞The Agricultural Exhibition of the Philadelphia Society for the Promotion of Agriculture, will be held at the old ground, in Rising Sun village, Germantown road, on Thursday and Friday, the 5th and 6th October next.

ACTION OF LIME, PLASTER AND CLOVER.

Fauquier County, Va., Orleans, July 2d, 1848.

To the Editor of the American Farmer.

Dear Sir:—I hope I do not trespass too much on your time by making a few enquiries, being a young practical farmer.

I have a field of very poor land, which I put in corn last year, and in the fall cut the corn off, not making more than one and a half barrels to the acre, and then sowed it in rye which will not yield me more than two bushels per acre. The soil is sandy with a subsoil of the red clay of this county, but the clay is rather beyond the reach of our ordinary plows—in places very full of white flint stones. I sowed on it this spring clover seed in the pugg. In August I intend sowing timothy seed and lime some time this fall.

My wish is to know if lime applied this fall on the surface will injure the clover and timothy, and the comparative effect of pursuing some other plan, as my object is the improvement of the land as soon as possible. I intend to apply manure as soon as I can make it, but this requires time. How will plaster act with the lime at the same time, and the comparative quantities?

This field had the character of being very productive before I came to it, but the former owner is said to have injured it by very deep ploughing, and throwing up too much of the red clay—since which it has produced nothing worth labor and seed. I have now been here three years.

In general, is the application of Lime best on the surface, or plowed in?

Any suggestions of yours about the management of this field will be thankfully received.

Yours very respectfully,

John H. Little.

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Reply by the Editor of the American Farmer.

In answer to the question, whether the application of lime to the clover now growing in the field described, and the timothy, which our correspondent contemplates sowing, will do injury, we answer, no. On the contrary, that it will do good, but we fear very much from the account of the product of corn last year, and that of rye the present season, that the soil has become too much exhausted by improvident culture to yield a remunerating crop of clover and timothy, without it should be assisted by animal or vegetable manure. Both clover and timothy require a soil in which nutritive manures abound, and we hardly think they can find it in one which has proven itself competent to produce only a barrel and a half of corn and 2 bushels of rye to the acre. By the application of *lime* the following results will occur. *First*, it will render *soluble* any organic vegetable remains which may be in the soil, in a dormant or insoluble state, but we fear the quantity which can be thus rendered available as pabulum, will not be sufficient, of itself, to meet the demand of the clover and timothy. Clover from its conformation—from its series of broad leaves—derives a portion of its food from the atmosphere, and when assisted by *plaster*, derives a still greater portion than it could, if left unaided by that *mineral*, whose peculiar province it is, to attract nitrogenous matter from the atmosphere, condense it in its own body, and there retain it until it may be dissolved by the falling rains, and conveyed into the soil, where it is taken up by the roots of the plants and converted into nutrition. It is to this peculiar property, that plaster owes its astonishing efficacy, when applied in such minute quantities as it is, of increasing the yield of clover. Though the benefit which timothy would derive from an application of plaster might be apparent, it would not be near so great as that derived by the clover, as the former grass, from the smallness of its leaves, does not possess the capacity of appropriating to itself, except in a very small degree, the nutrient gases ever present in the air.

For the reasons assigned, the effect of plaster, applied at the same time with the lime, would be highly salutary,—nay, we deem its application indispensable to any thing like success in the culture of clover and timothy.

Our correspondent says his object is the improvement of the land "as soon as possible," and that he intends "to apply manure as soon as he can make it"—and adds that that will "*require time.*" His object is a laudable one; but we are compelled by our sense of candor to say, that the procurement of the manure should *precede* all attempts to improve his land, as no land can be improved without it, and until improved, the soil on which he grew his corn and rye in 1847 and 1848, never will yield a good crop of grass.

We are pleased to find him disposed to pursue "some other plan," and with the view of lending him our humble aid, in carrying out his praiseworthy design, will state what we would do with his field were it ours:

1. If *possible* we would procure at the rate of 200 lbs. of guano, and 1 bushel of plaster, per acre, mix these well together, spread them on the clover now growing, plough the whole under 6 inches deep, harrow and apply 50 bushels of lime to the acre, then sow 12 lbs. of clover seed, 1 peck of timothy seed and ½ a bushel of buckwheat on each acre, lightly harrow these in and finish by rolling. The buckwheat will be struck down by the first frost of autumn, and keep the clover and timothy comparatively protected through the winter. As soon as the ground would allow of it in the spring, we would sow a bushel of plaster per acre, and pass a roller over the field. This last operation would press the standing stalks of buckwheat to the earth, where they would maintain moisture, and give out nutriment to the young plants of both clover and timothy and encourage their growth. In this way we believe he may assure himself a fair crop of grass next season.

2. By mixing at the rate, per acre, 10 double horse cart loads of mould and 5 bushels of bone dust together, and spreading it on his young clover,

ploughing it in, and applying lime as before directed, and sowing clover seed, he may also secure a fair crop of grass.

3. By top-dressing his clover with the above compost, then sowing timothy seed and applying lime he may effect the same object; but he must make up his mind, that without *manure*, he can never grow a good crop of grass upon such land as he has described to us.

Our correspondent says:

"This field had the character of being productive before I came to it, but the former owner *is said* to have injured it by very deep ploughing and throwing up too much of the red clay."

That the representation was made of the productive character of the field we do not question, but we rather think its productive character had been exhausted years gone by—not by deep ploughing, but by improvident culture. The *color* of the clay shows that it abounds in *salts of iron*. Such salts should always be treated with *lime*, as lime when it meets with any salt of iron in the soil will decompose it; uniting with whatever acid there may be in union with the iron, and thus forming a corresponding salt of iron, which latter being insoluble, is, consequently innoxious. *Salts of iron*, of themselves, are unfavorable to vegetation, and, therefore, whenever *subsoils*, which abound in them, are turned up to be mixed with surface soils, the operation would be the better of being performed the autumn or winter prior to the land being put in cultivation, and should always be *limed* at the time—so that the double action of *frost and lime* may be brought to bear to aid in decomposing and thereby neutralizing the unfriendly effects of the salts of iron, whether they be oxides or sulphates.

Our correspondent further asks:

"In general, is the application of lime best on the surface, or ploughed in?"

We reply, that it should always be applied on the surface, whether on newly ploughed land, on a clover ley, or on a grass-sward, the object being to impregnate the entire depth of tilth with the mineral.

Now, if, instead of sowing clover seed on his rye last spring, our correspondent had permitted it to grow until it *first* came into flower, then rolled it, and ploughed it under, harrowed, and sown buckwheat, and ploughed that under on its first coming into bloom, then harrowed, spread 50 bushels of lime to the acre, he might have sown his clover and timothy seed with some prospect of getting a remunerating crop, although we never would sow timothy with clover; for before the former is fit to be cut, the latter is past its period of being made into good hay. Orchard-grass is much better to combine with clover, and when the two are mixed together they make an excellent hay. *Timothy* should never be sown in poor land. Where orchard grass is sown alone, 2 bushels per acre is the quantity—when combined with clover half the quantity answers. Before sowing orchard grass, it should be spread on a floor and moistened with water, suffered to remain 12 hours, then mixed with ashes or plaster before being sown,—each kind of seed should be sowed separately.

In conclusion, the following may be laid down as agricultural *maxims:* that it is useless to lay down a poor field in grass without previously manuring it, both with nutritive and mineral manures,—that, where any considerable portion of a *subsoil* is brought to the surface, it should be ploughed and limed the previous fall or winter—that it is folly to lime land that is saturated with water the principal part of the year, and that subsoiling should never be resorted to upon any but dry sound soils, whether such soils be clay or sands.

DR. BREWER ON DISTRICT AND STATE CLUBS—INFLUENCE OF THE AMERICAN FARMER.

AIX LA CHAPELLE, June 27, 1848.

To the Editor of the American Farmer:

MR. EDITOR:—There is no subject on which I could be induced to give my opinion to the public, except Agriculture, having in advanced age withdrawn from a very laborious profession, and engaged in one little less arduous, for I am of opinion all persons, according to their physical and mental abilities, should be industriously employed. On entering upon my new avocation, although more agreeable to my inclination, not less arduous than the one I had abandoned, I soon discovered in my intercourse and conversation with my farmer-neighbors, a great lack of knowledge, and that most of their operations were performed without being able to give satisfactory reasons for what they did, save those of observation and hearsay—hence the same process was performed on a stiff or loose soil, argillaceous or silicious. Geology and Chemistry were sealed books to most of them. It is self-evident, and will not admit of argument, that no man can successfully prosecute a business he does not understand, nor can an ignorant man prosecute as successfully a business as a learned one, each using equal industry; I would, therefore, advise, nay urge the farmers of every election district in the State to form clubs, and by no means neglect to create libraries, and thus furnish the materials of knowledge. There is no lack of native talents among the farmers—all that is wanting is excitement and cultivation. Let the means be provided for their mental cultivation, and I will, at the risk of being called a demented, or at least a visionary man, predict that, within the ensuing twenty years, farming operations will be performed with steam or electrical ploughs, to the great saving of hard labor and enormous expense. What would have been said of an individual who, twenty years ago, had suggested the probability of navigating the Atlantic and Patific Oceans in steamships? Would he not have been called a madman? Most assuredly he would. It is incalculable what advances might be made in the sciences of agriculture and mechanics, if proper means and encouragements were provided for the cultivation of the minds of those engaged in these pursuits. We see all around us, wherever societies have been formed, though of short date and slender means, an improvement in the condition of the farms. In *this district* we have a club with a small but well-

selected library, and the improvement is obvious to the most casual observer, not only on the farms of the members, but through the neighborhood. I have been told that this improvement has arisen from a general spirit of improvement among the farmers. I would ask, what has produced that spirit? There cannot be an effect without a cause. The true answer is, the forming this club and library, *together with the circulation of your valuable work, the* AMERICAN FARMER, *which has had considerable circulation amongst us, and it is much to be regretted that it has not a much larger one, not only here, but over the whole State, indeed it should be in the hands of every Maryland farmer.* The *suggestions* published in your February number, approved and so forcibly advocated by your valuable and intelligent correspondent, "*Patuxent Planter*," to whom I owe a debt of gratitude, and who, I hope, will continue to wield his goose quill; it cannot be in better hands, nor can he have a more appropriate instrument for the hand of an independent cultivator of the earth. He, as well as myself, I am confident, would yield our opinions and most heartily advocate any judicious amendment which might be offered by others to the plan proposed. That something more should be, than is done, must be obvious to all; the longer the delay the greater the evil. There is more or less excitement and inquiry over the State, and, therefore, the present is a favorable moment to carry out this useful scheme. Once let this excitement cool down, and all experience goes to prove the great difficulty which will attend any future effort. This is the time, gentlemen of talents, influence and wealth, for you to act—let me entreat you to come to the rescue; alleviate the misfortunes of the laboring farmer—save your State from poverty and disgrace, and immortalize your own names as benefactors of Maryland. A little time and a little money can accomplish this great object. A few active men of character and influence in each district *can easily raise a club and* PREPARE FOR A STATE CLUB in October next, by appointing delegates to meet in Baltimore, whose duty it would be, as well as their pride and ambition, to do all the good in their power for the cause of Agriculture. Who cannot see that much can and will be done to promote the general welfare. *Common Salt* (off the seaboard) is an invaluable manure—I believe it indispensable,—*Potash* is not inferior in utility, and equally necessary,—*Guano* is proven to be among the most active manures known. The present prices of all these manures are beyond the reach of small farmers—men who have to labor for their living; hence, then, their use is confined only to moneyed men. While this is the case, the regeneration of your worn-out lands must progress slowly.

As soon as it is discovered that any article is beneficial to the improvement of your lands, it is immediately taken hold of by speculators and raised to a price beyond its real value. We expect these evils will be corrected by the *State Club*. United action can accomplish wonders. No fertilizer should ever be permitted to go to the farmer beyond actual cost and reasonable profit. All this and much more can be accomplished by the enlightened body proposed to be formed. I am fatigued, and will close these hasty remarks by urging you, too, into the cause, most heartily. With this I take my leave, entrusting this very important subject in your hands and those of your numerous and able contributors.

Your friend, WM. BREWER.

[Our correspondent will see by a notice on another page, that the ball is in motion.—ED.]

For the American Farmer.

CULTIVATION OF CORN AND WHEAT—VIRTUES OF SALT MARSH AND MARL, ASHES AND GUANO—REMEDIES FOR THE WEEVIL, FLY AND BLACK WEEVIL.

In a communication to the American Farmer, some months since, I stated that lands intended for a wheat fallow, should be ploughed at least one month before sowing.

A correspondent, in a late No., desires to be informed if I refer to the first or second ploughing. As I am somewhat in arrear to your paper, I will state my present system of cultivation, in which the inquiry will be answered.

My farm is divided into four fields and four lots, and I have some broken lands, which I use for pasture. I plant corn on clover, which I break up as early in the spring as the weather will permit, and plant 3½ feet each way, leaving two stocks in the hill. I cover with the harrow, and if the state of ground requires it, run over with the roller. As soon as the corn is thinned, I run over it with a large spike tooth harrow. When the grass begins to show, I use the cultivator, and give it one light ploughing before harvest. After my wheat is out, I go through it a second time with the cultivator; I do but little hoe work. From this course I deviate as the season may require; but my rule is to do no more work than the state and condition of the crop requires. The corn crop often suffers from stint of work, and sometimes from excess of cultivation. My neighbor ——— keeps his field generally cleaner of grass than mine; but my crop is often better than his. I sow no wheat among my corn, and my cultivation has reference entirely to my corn. I have seen a corn crop seriously injured by a cultivation which had relation to sowing wheat.

The field cultivated in corn, this year, stands over for wheat the next. It serves as a rough pasture the ensuing spring, till I can put my cattle upon my clover. As soon after wheat harvest as I can, I break it up, and run it down with a roller, or drag log, which I prefer, as it better impacts the ground, and the weeds and grass turned down, more thoroughly rot. I can generally keep under the summer grasses by a heavy spike tooth harrow, by which I also prepare the ground for sowing wheat. In a wet season, in parts of my field, the grass sometimes takes such a vigorous growth, that I am obliged to use the plough a second time. I have found, from experience, that on improved lands, where clover has stood two years, the blue grass gets so strong a growth, that there is great difficulty in preparing the ground well for wheat; but where it has been cultivated the antecedent year in corn, a summer ploughing, the sequent year, will subdue the blue grass, put it in good order for wheat, and in proper condition for clover the following spring. I have long abandoned sowing wheat among corn: where my lands were impoverished, the wheat was poor; and when improved, the growth of *crab* grass and *foxtail* so strong, that the wheat could not be put in such condition and such time as to produce a full return. The putrescent manures, which I collect from the farm yard, and salt mud and shell marl, with which my lands abound, I draw out and plough in with the wheat. I never sow wheat till the cool weather in October disarms the Hessian fly, by which I seldom suffer. I observe no regular system with my lots; I depend on them for hay; graze and cultivate them as I deem necessary. Under this course of hus-

bandry, my lands have improved and my crops increased.

There is a high pressure system of agriculture, which tells well in Farmers' Clubs and agricultural periodicals, which may be well indulged by gentlemen of fortune, who engage in agriculture from taste, amusement, or display; but which, if adopted by men who depend on their farms for their living, would, probably, subject them to unpleasant visits by the sheriff. The late Robert Oliver, who had acquired great wealth in successful trade, late in life, for occupation and amusement, undertook the improvement of a farm on the Gunpowder river, in which he was eminently successful. He once gave me an account of his large products, but added, that he found farming an expensive business. I suspect, if the expenditure and profits had been accurately adjusted, the balance would have been against the farm.

Where lands are in an utter state of exhaustion, to cultivate them without improvement, is attended with certain loss. Marsh mud and shell marl have never failed on my exhausted lands. As a matter of fancy, I once got a thousand bushels of ashes from Baltimore, which produced no visible effect; at another time 300 lbs. of guano, which was attended with the same result. I do not mean to question the transcendant effects which I have heard and read of from the application of these manures; but have come to the conclusion that the articles I got were defective in quality, or there are some properties in my soil with which ashes and guano do not amalgamate. Some years ago, a gentleman of Philadelphia, who had retired from business, improved and embellished a farm on the banks of the Delaware upon a magnificent scale. Among other means, as I have heard, he used a fifteen-horse steam power to irrigate his fields by the water of the Delaware. When this project was supposed to be in successful operation, I met some Philadelphia merchants at the Yellow Springs, who reported the sales of the grapes in one season to be ten thousand dollars.—The artificial showers, and consequent rainbows under a cloudless sky, must have excited the admiration of the natives of Bucks county.—Mr. Skinner, the late editor of the American Farmer, visited the establishment, of which he published an account, and seemed as much astonished at the magnificence and arrangement as John Bull was when he "saw Versailles from Marly's heights."

I, last summer, saw some publications in your paper in relation to the *Weevil Fly* and the *Black Weevil*. The weevil fly deposites its egg in the grain, in its green and tender state. If the wheat is threshed soon after harvest, and thrown into bulk, it undergoes a heat, which destroys the egg, and it sustains no injury; but if it remains long in the shock or stack, the weevil hatches, and makes its way out of the grain, to its great injury, both in weight and quality. One degree to the North of us, this pernicious insect is but little known. *Here* I have sometimes marked its absence for several years; but, after a mild winter, they generally appear. In the more Southern States, I believe, they are never absent.

The Black Weevil haunts our granaries, where they are generated. Some years ago I suffered much injury from them, but have now an effectual defence. When my granaries are clear of grain, I place powdered brimstone in an earthen pan, which, for safety, I put on the floor in a bed of sand, closing doors and windows, and I fire it. The smoke either destroys them or drives them off.

WM. CARMICHAEL.

Wye, Queen Anne's Co., Md., 8th July, 1848.

CULTURE OF TURNIPS—SOWING CLOVER SEED—VALUE OF NIGHT SOIL.

Baltimore County, July 1st, 1848.

To the Editor of the American Farmer.

DEAR SIR:—I want to tell my brother farmers how to raise a good crop of Turnips; it is easy enough done if they only go the right way about it, and as I speak from personal experience perhaps the relation of my mode of culture may induce others to abandon the old fashioned system, and adopt a better. Here it is:—Select your ground at least a month before you seed; spread broadcast thereon a dozen 2 horse loads of good stable manure to the acre, plough it well under, harrow and cross harrow; if the ground is dry and breaks up full of clods, take advantage of the first rain and harrow again thoroughly. About the fifteenth of July, and from that to the first week in August—the earliest time is the better, but the later will do—plough again and harrow. Now strike out furrows twenty-seven inches apart, and put into them six two-horse loads of well rotted manure; cover instantly with a double furrow as you would for potatoes, then put on your roller and press down the crown of the ridges. When this is well done, take a drill barrow and drill in the seed, or in the absence of that implement—though every good farmer ought to have one—make your drill with a stick, sow them carefully by hand, and press down with the wheel of a common barrow. One pound of seed to the acre is all sufficient. As soon as the plants are up, if the fly is at work, dust them over with slacked lime several mornings in succession while the dew is on. When the leaves spread to the size of the palm of your hand, thin out to six or eight inches in the rows, hoe the earth lightly to them, cut out all weeds between, and finish by keeping the ground loose with the cultivator. If these directions are followed, I have no hesitation in insuring a decent crop in any season, and an excellent one if the weather is at all favorable. I have tested it myself for five years and never once failed of success even in those years when the crops of my neighbours, cultivated in the old broadcast method, were absolutely worthless.

Now for the benefits and results:

First—The plants require but one hoeing, and that only where they stand along the flattened ridge, the intervals being effectually kept clean by the cultivator.

Second—They start into rough leaf quicker, and thus are sooner relieved from the possibility of loss by the ravages of the fly.

Third, and most important,—They yield better and with a far greater certainty, and being pushed forward and kept growing rapidly by the manure beneath, are of course less inclined to become fibrous in a bad season.

A few words as to the yield and profit, and I have done with turnips for the present.

My yield has, of course, varied with the season. It has never been less than three hundred bushels per acre, and has fluctuated between that and six hundred, my maximum as yet. The earliest pulled sold one season in the Baltimore market at seventy-five cents per bushel, and gradually selling for less and less until when the market became glutted, I sold all I did not wish to retain, at from forty to sixty cents a barrel, and the crop paid well at that; they have never, in any year, averaged less than fifty dollars to the acre, and oftener rose from seventy-five to a hundred. Where is the acre of corn that will do so well? Now try my plan my friends, and if you

intend to market your turnips, let them be of the purple top variety. If, however, you require them larger for stock feeding, select the white Norfolk.

And now I am about to give a word of caution to young beginners. Never sow clover seed on a clover lay turned under, or nine times out of ten you will lose your labor, and the value of your seed besides. I don't pretend to account for this, but I know it to be a fact, taught me by that severest, though perhaps, best of all teachers, Experience.—What you must do, if you wish to set clover among wheat, is this, and it is a very good plan too, with only one fault, and that is, you thereby get your wheat in rather too late to please me. But if you desire to re-set your clover you must either top-dress well or else refrain from ploughing in your clover for wheat, until it has matured its seed, and the stems are pretty well dead. Seed your wheat *upon the clover* if you choose, and plough wheat and clover under together, with a furrow not deeper than four nor less than three inches. In this way you leave your land tolerably rough all the winter—a great advantage to the young wheat—and by light harrowing and *well* rolling in the spring you will still further benefit the growing crop.

What a pity it is we are all so fastidious about the use of night soil. It is a most powerful manure, as I can testify; and lasting too, if it is prepared in the right way. Seven years ago, I had a lot fenced in at the outskirts of the city, and engaged a "*stercorarius*" to drop his loads there. The lot was an inclined plane with an embankment close to the fence, made so purposely. As the manure was deposited, the liquid flowed into the trench, while the more solid parts remained upon the slope; all of it was regularly covered at each deposit with two inches of tanner's bark. At the end of six months it was hauled away, perfectly disinfected, and applied at the rate of twelve loads to the acre, to a poor worn out field. The corn was magnificent,—wheat succeeded, and from four bushels—its former crop—it came up immediately to eighteen. The clover set beautifully, and although it has never received any dressing since, with the exception of a heavy clover lay turned under, it is still one of the best fields I have, the clover cutting even this indifferent season, one and a half tons to the acre. The tan bark gave the manure permanence. Now the cost of this manure was less than a dollar and a quarter a wagon load. Another caution. Never apply Guano as a top-dressing to grain crops. The best way I have seen, is to dig a dry pit in the ground, and put your guano into it well mixed with woods earth or good mould—cover it well over, and let it remain a month before you use it—if you add a sprinkle of plaster so much the better. When you take it out mix it again thoroughly, and spread upon the surface, for wheat, from two hundred to two hundred and fifty pounds per acre—of the Guano, not the mixture—plough it under four or five inches, seed your wheat, and the next spring seed down to clover. Guano will not last more than two years, but if it brings you a magnificent crop of clover on what was before poor land, what more can you expect? When once land is well set in clover it is in a fair way of thorough renovation—plaster—a well chosen rotation—judicious farming and no skinning, is all that is then required.

Here, Mr. Editor, I close this my first communication, with the hope that it may be of some slight service to others. The brotherhood of farmers is more intimately connected than that of any other profession; shall I be accused of vanity if I say I think it is more ennobling? *That* rivalry is surely a generous one in which men seek to emulate and surpass each other in well doing—causing the earth to teem with more abundant harvests—beautifying the surrounding scenery and restoring to vigorous healthfulness localities heretofore sickly. And the desire to reveal frankly what they know in regard to the mystery of their calling, is surely an evidence of fraternal feeling in which *self* has no share—a virtue alas! but too rarely exercised among men subject to the narrowing influences engendered by the jealous collisons, desperate ventures and trials of temper incidental to the lot of those who dwell in cities and are hardened as well as polished by attrition.

AGRICOLIST.

—

Remarks by the Editor of the American Farmer.

We approve of the plan of growing turnips laid down by our correspondent. From *experience* we know it to be a good one, and from our *reading* we also know it to be the one pursued in England by which such heavy crops have been made for years.

We dissent, however, from the opinion which he expresses as to the durability of *Guano*,—that is, that it will only last two years. If *properly applied*, its effects will last for several years, at least during a rotation of crops. The *Carbonate of Ammonia*, which may be already formed at the time of its application, may not last longer than the time named by him, however fixed it may be by the agents; but there are constituent elements in its composition, which are not volatile, but which are susceptible, by the operations of heat, moisture, and time, of being decomposed into nitrogenous substances, when they, also, become volatalized, and are given out as food to the plants, but this transformation is of gradual achievement, and is carried far beyond the period of two years, because, the changes being slow, the gaseous eliminations combine with the vegetable remains of the soil, and are held in reserve to be drawn upon as food by the plants, as may be required by their specific necessities. *Again*, there are other mineral bodies comprised in Guano, which cannot, by any process of decomposition be converted into volatile bodies, and which, of course, remain in the soil, in position, to be taken up by the growing crops from year to year; and which must, in the very nature of things, continue for a series of years, as their only source is the periodical supply which they from time to time in moderate quantities, yield up in a liquid form to carry on the healthful operations of vegetation.

We dissent, too, from the plan of preparing the Guano for application, as proposed by our correspondent. The combining it with mould and burying it in a pit for a month, is calculated by the intense heat which will be thus created, to waste the already formed Guano and to bring on a *too rapid* decomposition of those of its elements which are liable to be thus acted upon, so that, by the proposed process, besides the loss which will be sustained, a much larger body of ammoniacal food will be prepared

than is necessary, or than can be taken up by the plants, and which, from its volatile nature, must find its way through the pores of the earth, escape, and be lost. We doubt not that Guano, prepared and applied in the way proposed, would be deprived of its nutrient principles in much less than the time stated by our correspondent, but then it would be owing not to any fault in the manure itself, but to the erroneous plan of its preparation and application.

Guano has always a very sensible portion of the *Carbonate of Ammonia* already formed—a quantity sufficient to answer the purposes of culture—and why, we would ask, should any means of artificial excitement be resorted to, to hasten the natural process of decomposition to which it is subject? There is no good reason for so doing; but on the contrary, enlightened economy would indicate, that *fixidity* should be given to the volatile part of this excellent manure, and hence it is, that we have always recommended that a bushel of plaster should be combined with any quantity of plaster applied to an acre of land, and that it should be thoroughly mixed with it. By this mixture of Plaster with Guano, the sulphuric acid of the former, from its greater affinity for ammonia than for lime, is liberated, when a new compound is formed between the two former, to wit: the *Sulphate of Ammonia*, a form in which the latter salt is much more moderately soluble, and, therefore, the longer retained in the soil—the more durably efficacious as the food of plants. We say then, that, in all applications of Guano, one-third its weight of Plaster should be thoroughly mixed with it, before it may be applied—that, as so mixed, the two should be sown broadcast on the soil and ploughed in, as speedily as possible, to whatever depth it may be found desirable to have the furrow.

There are other modes by which *fixidity* may be given to the already formed ammonia of the *Guano*.

1. By mixing 5 bushels of charcoal with every 100 lbs. of Guano.

2. By mixing with a like quantity of Guano, 10 bushels of loam or mould, and diluting the mass, generally, with a solution made of 10 lbs. of sulphuric acid and 10 gallons of water, or by dissolving 10 lbs. of the Sulphate of Iron—copperas—in 10 gallons of water, and sprinkling it gently over the mass, and thoroughly mixing the whole together. But as the mixing of Guano with plaster, is the neatest and least troublesome mode, we prefer it.

CULTURE OF THE GRAPE.

We make the following *extract* from an article in the *Iowa Farmer*, upon this subject, with the view of bringing home to the mind of every farmer, great and small, the facility with which he may provide his family with a supply of this delicious and healthy fruit. As the whole argument in favor of the proposition is compressed within the size of a nutshell, we shall not weaken its force by an attempt to enforce it by any remarks of our own, farther than to observe, that, as it is the duty, so should it be the pleasure, of every agricultural head of a family, to procure for it an ample supply of every fruit that gratifies the taste and promotes health:

"As the time of fruit eating, from the strawberry to the codlin, is near at hand, and as many of our readers when they come to the eating of the almost worthless productions of our native grape vines will then, if not now, wish they had something better, we intend in this, and in a few subsequent numbers, to call their attention to the subject of grape culture, in hopes to convince them that it requires but very little labor, and a still less expense to provide themselves and their families with an abundant supply of this most delicious fruit. There are several excellent varieties of the grape, so hardy that they will stand, with very little protection, the severest weather of the northern States, while they are equally adapted to southern latitudes, even to the very borders of the Gulf of Mexico. Among these we rank first the Catawba and Isabella. These grapes—good and well established vines of which may be had at almost any of our nurseries at 20 cents each, and frequently for half that sum, will, if properly planted, a process requiring according to circumstances from ten to sixty minutes to each vine, yield after two years from twenty to one hundred bunches of grapes on a vine, every bunch of which, in a man's family, is worth the first cost of the stock.

We know not how it is—we cannot account for it—that men reside year after year on their farms and never plant a vine. Some never plant a tree. A grape vine is certainly a small matter, and yet we know of one—a single one, the fruit of which has sold for seventeen dollars in one year—seventeen dollars—the price of one hundred and thirty-six bushels of corn at 12½ cents per bushel—or thirty-four bushels of wheat at its ordinary price. Now, how much labor would be spent in the production of each? How much more on the corn or wheat than on the vine—twenty times at least.

It is a common excuse for not planting fruit trees that it takes them a long time to bear. Not so with the grape, certainly. There are vines in this city, which were not in existence three years last March, and which are now loaded with—the promise of fruit. Ask their owners how much money they have cost? perhaps 25 cents each; how much labor? thirty minutes; how much land do they occupy? a square yard, or probably less—what will they sell the mere promise of fruit for? and they will tell you as one of them told the writer—"not for fifty times the original cost." And this too by men who love money as well, and need it as much as any of us. Then why do not others do the same thing—plant a vine, two, five, or twenty of them? We ask them again, why do they not? They "don't know."

One of the benefits of fruit, and particularly of grapes, in a family is, that it contributes to health."

Gapes in Chickens.—A writer in the Ohio Cultivator, recommends the following remedy for this disease in chickens: "Steep lobelia and red pepper in hot (not boiling) water, and mix the food with this liquor as strong as they will eat it, until the chickens *gape* "for certain." It is both a preventive and a remedy. We tried it to see if it would kill some hopeless chickens, but they would live in spite of it, and now we have no trouble with this disease.

THE AMERICAN FARMER.

BALTIMORE: AUGUST 1, 1848.

TERMS: $1 per annum, in advance—6 copies for $5—13 copies for $10—30 copies for $20.

Address SAMUEL SANDS, Publisher,
2 Jarvis' Building, North-st., Baltimore, Md.

POSTAGE ON THE "FARMER."—We understand that some of the postmasters are in the habit of charging pamphlet postage on our journal. To correct this error, we re-publish from the August No. of vol. 2, (1846,) the following note in reply to one from us upon the subject:

Post Office Department,
Appointment Office, July 8th, 1846.

SIR:—Yours of the 7th instant is at hand. In regard to the amount of postage chargeable upon the "*American Farmer*," the Department is of opinion that said publication may be classed with newspapers.

Very respectfully, your ob't serv't,
WILLIAM J. BROWN,
2d Assistant Postmaster General.

Samuel Sands, Esq., Baltimore, Md.

TO WRITERS UPON THE SUBJECT OF AGRICULTURE.

$100 in PREMIUMS!!

The admirable Essays upon the "RENOVATION OF WORN-OUT LANDS," which appeared in our last volume, excited so much interest—challenged such warm encomiums, and were so universally admired by the agricultural public throughout the country—were of such vital importance to a very large portion of the proprietors of lands in the old States, and aroused so general a spirit of improvement, that we have come to the conclusion to offer the following

PREMIUMS:

No. 1. A piece of SILVER PLATE of the value of **$50,** to be given to the author of the *best* Essay upon the RENOVATION OF WORN-OUT LANDS; the cost of improvement, the time of effecting, and the permanency of said improvement when made, to govern the judges in making up their decision, all other things being equal, preference to be given to that plan which is least expensive and best calculated to ensure fertility and lastingness—the essay not to exceed in space, ten pages of the American Farmer.

No. 2. A piece of SILVER PLATE of the value of **$30,** to be given to the author of the 2*d best* Essay on the same subject—the judges to be governed in their decision by the same principles as to cost, time, and durability, &c. as in the first premium.

No. 3. A piece of SILVER PLATE of the value of **$20,** to be given to the author of the 3*d best* Essay upon the same subject, the judges to be governed in their decision, by the same principles as in the cases of the first and second premiums.

The plate will be manufactured by Messrs. Kirk & Son, of this city, with suitable inscriptions engraved thereon.

The essays are expected to be based upon the knowledge of *facts* which may be stated therein, either thro' the experience of the writer, or from well authenticated data.

All essays, whether awarded premiums or not, to be published at the option of the Editor, the authors of the unsuccessful essays, however, reserving to themselves the right of withholding their names at their discretion.

All Essays to be either handed in or transmitted to the undersigned by the 1st day of September next. Each essay to be accompanied by the name and residence of the author. The publication of the essays to which the Prizes may be awarded, will be commenced, if practicable in the October No. of the American Farmer, and the PRIZES will be exhibited and presented at the Fairs to be held in the Fall, either in Prince George's, Talbot, or Montgomery counties, or at the Fair of the Maryland Institute for the Promotion of the Mechanic Arts, to be held in this city in the month of October—of which due notice will be given.

The several essays to be addressed to
SAMUEL SANDS,
Publisher of the American Farmer.
Baltimore, Md.

The following gentlemen have been solicited to act as Judges:

Hon. Judge CHAMBERS, of Kent county, Md.
Hon. Judge DORSEY, of Howard District, Md.
Hon. CHAS. B. CALVERT, of Prince Geo's Co., Md.
Gen. WM. H. RICHARDSON, of Richmond, Va.
Hon. WILLOUGHBY NEWTON, of Westmoreland, Va.
Dr. J. W. THOMPSON, of New Castle, Del.
Dr. WM. DARLINGTON, of Chester Co., Pa.

DR. BREWER.—It will be seen that this enthusiastic and enlightened farmer has again taken up the subject, and enforces anew the importance of forming DISTRICT and STATE AGRICULTURAL CLUBS, the latter to meet in Baltimore this Fall, to devise measures calculated to promote the welfare of the farming and planting interests of Maryland. We most heartily concur in sentiment with Doctor *Brewer*, and sincerely hope that advocates may spring up in every neighborhood throughout the State to carry into effect the measure proposed, believing as we do that it is calculated to do essential good.

THE WHEAT HARVEST.—From information which we have received, we fear that much of the *late* Wheat in Maryland, Pennsylvania and other States, suffered greatly by the rains in the first two weeks of July. Much of it, after being cut, was exposed upon the ground, and, of course, became more or less sprouted before it could be housed, while a portion, and that not an inconsiderable one, was uncut, and, consequently, subjected to great loss from being over-ripe and shattering while being cradled.

These losses would seem to indicate that *early sowing* and *early varieties* of Wheat are the best guaranties against those rains which most generally prevail in the early part of July—while they also admonish us of the necessity of going into the harvest field strong-handed, in order that the grain when raised may be secured against the casualties of "flood and field."

"*An E. S. Man*" is in type, but crowded out.—"*Z.*" is received.

STATE CATTLE SHOW AND FAIR.

It will be seen by the Circular of the Board of Managers of the *Maryland Institute for the promotion of the Mechanic Arts*, that it is intended to hold their First Exhibition in this city, commencing on the 31*st of October*, 1848, to continue for three weeks, and that a CATTLE SHOW AND FAIR, in connection therewith, will take place ON WEDNESDAY, THE 9TH NOVEMBER, and continue TWO DAYS. The Board of Managers have adopted a resolution, inviting the Farmers, Planters and Horticulturists of Maryland and the adjoining States to co-operate with them in the Agricultural portion of the Exhibition, which, as far as our information extends, is warmly seconded by those to whom the appeal has been made; and it will be seen by the following note from Mr. CALVERT, well known as one of the most extensive farmers of our State, and a prominent member of that enlightened and successful Association, the *Prince George's Agricultural Society*, that the matter is brought to a tangible point, and a day fixed for the assembling of the Delegates from the several Societies and Clubs, and others disposed to take part in the arrangements necessary to carry into effect the object of the Institute. And we need not say, that we have no doubt that a full representation from every section of our own, as also from the adjacent States, will respond to the call.

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To the Editor of the American Farmer:

SIR:—It afforded me great pleasure to observe in the last number of your very valuable paper that the agriculturists were invited by the Mechanics' Institute to take part in the Exhibition to be held in the city of Baltimore this fall, and I trust that the dormant energies of this portion of the community will be aroused by this appeal, and that the agriculturists of the whole State will see and feel the importance of sustaining a society which has for its object the improvement of the Mechanic and Agricultural Arts. With a very little exertion on the part of those who feel an interest in the matter, this exhibition may be made to excel those which are annually held in the Northern cities; and is it not a shame that Baltimore and the State of Maryland should be so far behind their neighbors in giving encouragement to the two great interests which must always be the great sources of their prosperity? In order to give full effect to this appeal, I would propose that a Convention of Agriculturists be immediately called, to meet in the city of Baltimore on the 5TH DAY OF SEPTEMBER, to arrange matters connected with their portion of the exhibition. In those counties where agricultural societies at present exist, delegates might be appointed by the executive committees or officers of the societies, and in those counties where no societies have been as yet formed, the delegates might be appointed by a public meeting, held at the county town, as it is desirable to have every county represented. This State Convention could, if it is deemed expedient, call a National Convention, to be held about the time of the exhibition, for a general discussion of all matters appertaining to the *great interest* by which the world is supported, and it is therfore hoped that no county, district or city in the State feels so little interest in the matter as to neglect to send a representative to the Convention. It appears to me that you cannot benefit the cause in any manner more than by urging upon all parts of the State the importance of making an effort at this time, to place agriculture on the high position which she should occupy in the minds of all. As I merely wished to call your attention to this matter in order that you might take some notice of it in your next number, I conclude by subscribing myself

Your obedient servant,

CHAS. B. CALVERT.

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☞Since the above was received we have been requested by JOHN GLENN, Esq., President of the MARYLAND FARMER'S CLUB to publish the following call for a meeting of that body, to unite in making the necessary arrangements for the proposed exhibition. The meeting will be held in the Hall of the MARYLAND INSTITUTE, the use of which has been tendered by the Board of Managers for the purpose.

MARYLAND FARMERS' CLUB.

A meeting of the Club will take place at the Hall of the Maryland Institute for the Promotion of the Mechanic Arts, over the Post Office, on TUESDAY, the 5th day of September next, at 10 o'clock, A. M. for the purpose of uniting with the Delegates from the several Clubs and Associations of the State in making the necessary arrangements for holding a CATTLE SHOW AND FAIR on the 9th and 10th November next, agreeably to the suggestions of the Board of Managers of the Maryland Institute. As the subject is one of great importance to the Agriculturists of the State, it is hoped a very general attendence will be given. By Order of

JOHN GLENN, President.

SAMUEL SANDS, Rec. Secretary.

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THE MARYLAND INSTITUTE FOR THE PROMOTION OF THE MECHANIC ARTS,

Announce to the public that its FIRST EXHIBITION OF AMERICAN MANUFACTURES, will be opened at *Washington Hall*, in the City of Baltimore, *on TUESDAY, the* 31*st of October*, 1848.

In this announcement of our First Exhibition we earnestly desire that the whole subject, together with its bearing upon the interests of Industry generally, and more especially upon the welfare of the *Manufacturer*, the *Artizan*, and the *Mechanic*, may be fully known, and duly appreciated.

It is obvious that the inventive genius of our countrymen, is becoming every year, more and more active. Every little town and village in our land is pouring forth its perpetually growing tribute, to swell the great stream of National Industry, each vieing with the other in the variety, as well as in the continual improvement of their respective products.—And we feel assured from the evident benefit resulting from those held in other cities, that no better course can be devised for the furtherance of the great interests above mentioned in Maryland, than the one which thus brings together, under one general view, the varied products of industry, science, and taste; thereby affording to the community a full opportunity for correct judgment upon their entire course and progress. Possessing, as we do, every facility for displaying those productions to the best advantage, we are enabled to assure those interested, that full justice shall be done to every one, so far as

our best endeavors may avail, and therefore hope that our friends and all others who may have the inclination or ability will lend us the aid of their influence and good feeling on the present occasion.

The undersigned forming the government of the Institute for the present year, and being vested with full powers to make every necessary arrangement, do therefore most respectfully invite and solicit Mechanics, Manufacturers and Artists; all who may have made any discovery in Science or in Art; and all who may have invented or improved any useful machine or implement, to offer for exhibition or premium, any and every description of Article, whether of Wood, Stone, Metal or any other material, which may serve any useful or ornamental purpose. The products of the Loom, whether of Cotton, Wool, Silk, Flax, Hemp or Hair; and all articles the result of female ingenuity, skill or taste, shall also have a place in the exhibition.

We further state that we will hold a CATTLE SHOW AND FAIR, in connection with the Mechanical Exhibition, and that a suitable place will be provided for the exhibition of STOCK, the PRODUCTS OF THE FARM, DAIRY, GARDEN, &c. Farmers, Planters, and Horticulturists are particularly requested to give their countenance and aid to this part of the enterprize. The exhibition of Stock, &c. connected with the Cattle Show will commence on *Wednesday*, the *9th November*, and continue 2 days. The PLOUGHING MATCH will take place on Thursday, the 10th.

MEDALS OR HONORARY DIPLOMAS will be awarded as the articles exhibited shall deserve,—and the government pledges itself to observe the strictest impartiality in their distribution. Gentlemen of character and competent knowledge, in every department, will be selected as judges, who will in no case be competitors for premiums.

In issuing this notice we appeal not to Maryland alone, but to all parts of our common country, (who are by improved modes of communication virtually brought nearer to us than many parts of our own State formerly were) to unite with us in this exhibition, for as our interests are one, let us prove in the field of honorable competition, that industrial capacity is confined to no particular locality, but is co-extensive with our Union, and like it, one and indivisible.

As much inconvenience and dissatisfaction results from the late reception of Articles, contributors are earnestly requested to send their goods in season, that they may be entered on or before *Monday*, the 30th October. And if so sent, the managers will take care that all shall be properly arranged and displayed; but they cannot insure this, when articles are received after the above named period, although they will in all cases do their best to effect it.

ADAM DENMEAD, Chairman.

JOSEPH K. STAPLETON,	FIELDING LUCAS, JR.	Board of Managers.
GEO. J. ROCHE,	SAMSON CARISS,	
H. HAZLEHURST,	JOSIAH REYNOLDS,	
EDWARD NEEDLES,	ISAAC BROWN,	
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B. S. BENSON,	ROBERT POOLE,	
WILLIAM PETERS,	WILLIAM FERGUSSON,	
WILLIAM MINIFIE,	THOMAS J. CLARE,	
THOMAS TRIMBLE,	ROSS WINANS,	
WASHINGTON PAGE,	E. STANSBURY, JR.	
AMOS GORE,	C. W. BENTLEY.	

SAMUEL SANDS, Secretary.

We promised in our last to present lithographs of some of Mr. Calvert's fine cattle—As his herd will be here at the Cattle Show in November, where the best artists will be on the spot to take drawings of them, we have concluded to postpone their publication until after that period.

EFFECTS OF PERUVIAN AND AFRICAN GUANO.—A gentleman of this city, who has a farm in Baltimore County, purchased one lot of *Peruvian* Guano and another of African, not being able to get a supply of the former. He put in 7 acres of millet on the same piece of ground, located in a bottom of isinglass land, much exhausted by impoverishing culture. To about 1 acre he applied 200 lbs. of *Peruvian* Guano—to the adjoining 5½ acres, he applied *African* Guano, in the same proportion, and left *undressed* the residue of the seven acres. Now for the results: the portion manured with the *Peruvian Guano is covered with a most luxuriant crop of millet*—the adjoining 5½ acres, dressed with *African* Guano, is at least a foot *less* in height, while between it and the slip *undressed*, there is scarcely any perceptible difference. The time being opportune, we give these facts without comment, leaving it to farmers to draw their own conclusions.

WHEAT.—We have received from Mr. M. C. Jones of St. Mary's Co. a beautiful sample of the Etrurian wheat, raised by him. Mr. J. informs us that it has succeeded admirably, and that his neighbors are adopting it in place of other varieties.

We have also received a sample of the Hershy white wheat, raised on the farm of Mr. R. T. Bentley, of Montgomery Co. This variety of wheat is highly spoken of, as well for its yield, as its capacity for making very fine flour.

MONUMENT WHEAT.—*Col. Charles B. Belt*, of *Tannelly Town, District of Columbia*, has sent us a remarkably large head of bearded Wheat, grown by him on his *Chevy Chase* farm in the District of Columbia, the present season. The part of the head occupied by the kernels is 5¼ inches in length, well filled with plump, yellowish grain, from its butt to the terminating point. Its history, as given by Col. Belt, is as follows:

"I send you one head of Wheat, which I call my *Monument Wheat*. It is something new in this country. Some years since, a few grains were found in the straw that covered G——h's statue of Washington; from that I now have about ½ a bushel of seed —late sown last fall."

This wheat appears to us to be of superior quality, and if it should, on further trial, turn out to be heavy and of prolific yield, will doubtless become a favorite variety.

We have received the proceedings of the Medley's District Agricultural Society, and the Report on Farms.—Our pages were pre-occupied, before their reception, but we hope to be able to give them entire in our next.

John S. Skinner, Esq., late the able editor of the "*Farmer's Library*," has purchased that work; and having removed from New York to Philadelphia, has discontinued it. He has, however, associated with himself his son, Frederick G. Skinner, Esq., and now publishes a *new* work, in the latter city, devoted to the interests of Agriculture, and the producing classes generally, under the title of "*The Plough, the Loom, and the Anvil.*" The first number of this new periodical is before us; and having read it with care, pleasure, and profit, unhesitatingly say, that while its editorial matter displays that depth and strength of thought, that refreshing elasticity and raciness of style and diction, that ardent attachment to the cause of husbandry, for which the senior editor has ever been distinguished, its selections evince soundness of judgment, propriety of taste, and a happy adaptation of means to ends. The *title* of this journal is descriptive of its aims and objects —the promotion of the welfare of the industry of the country as a great integral whole. And we may say, in all singleness of heart, if an intellect of the highest order—if courage that never failed—if industry that never tires, and a zeal that knows no bounds, can offer guaranties of success, all would be found in the person of John S. Skinner. That success may crown the efforts of the editors shall be our sincerest prayer: nor can we doubt their success, when we reflect that the *senior* partner was the *pioneer* in the agricultural literature of the country—that to his efforts the landed interests are indebted for many millions of increased value being imparted to their estates—and that he has done more than any other individual to elevate the agricultural character, and give impetus to that generous spirit of improvement which is now abroad throughout our land, renovating its exhausted fields and making the wilderness blossom as the rose. We repeat—God speed "*the Plough, the Loom, and Anvil;*" and may its enterprising editors never have occasion to say that Agriculturists, like Republics, are ungrateful.

Hon. Mr. Carmichael's Communication.—Our esteemed correspondent, the Hon. Mr. Carmichael, with his customary courtesy has responded to an inquiry made of him as to his method of ploughing for Wheat, and in so doing has added some most valuable information upon the subject of the *corn culture —the virtues of salt, marsh mud and shell marl*—and the remedies for the *weevil fly* and the *black weevil*, two troublesome enemies to the wheat crop. As well as ourself the agricultural community will feel largely indebted to him for his excellent paper.

Mr. Carmichael, with becoming frankness, details failures which he has met with in experimenting with *ashes* and *guano*. We suspect the cause to be, that in his "*salt-marsh-mud, shell marl* and *putrescent manures*" he furnishes his lands with similar salts to those found in *ashes* and *guano*, and hence their apparent inefficacy. Had he tried those manures on his *exhausted* lands, if he have such, he would have not only *seen*, but been proud to acknowledge their wonderful efficacy.

Mr. C. accompanies his communication with the following remarks relative to our journal and prize essays, which we take the liberty of publishing. He says:—

"I send you an article for the American Farmer, and am pleased to learn that its circulation is extending and of course your profits enlarged.

"I see you have offered handsome premiums for the best essays upon the improvement of worn-out lands, their length not to exceed ten pages of the American Farmer. If I were to enter the lists, (which I shall not,) mine would be comprised in less than ten lines. I would recommend 100 cart loads of compost, made from the stable or cow-yard, or 100 cart loads of marsh mud, from a salt water river, which I deem equally good, and 500 bushels of shell marl from a marl bank, the properties of which had been proved, to the acre. My friend, Mr. Maddox, of your Post Office, was here on a visit last summer; he saw corn growing on my lands which had been marled twenty years ago, and deemed it equal to the improved lots around Baltimore."

Guano.—In our last we stated that there was no *Guano* in market, and the probability was, that there would be none in time for the wheat this fall. Our information was derived from one of the principal dealers, who supposed we had allusion to the *Peruvian*, to which the remark was applicable. We learn that there are some lots of the inferior kinds in the market; but of the *Peruvian*, which most farmers would prefer to use, even at the higher rate at which it sells, there is no prospect of a supply this Fall. See advertisements.

Agricultural Truths.—We hold these to be agricultural truths:

1. That *mineral manures* are necessarily inoperative upon *wet soils*, and, as a consequence, that all such soils should be drained.

2. That *nutritive manures*, when applied to *wet* lands, do not have half as much effect as when applied to sound, dry ones.

3. That no system of improving lands can be considered perfect or permanent, which does not include liming, ashing, deep ploughing, clover, and rotation of crops.

4. That no progressive improvement can be successfully conducted, unless one-fourth or one-fifth of a farm shall be in clover and grass.

A Perfect Cure for the Potato Disease has at last been discovered, and applied to the crop in Germany.—Dr. Klotsch, of Berlin, has received a reward of $1400 from the Prussian Government, for the discovery. The same manner of preventing the disease was discovered nearly at the same time by the celebrated Prof. Leibig, but Dr. Klotsch has tested it for the space of three years successfully and on a large scale. The plan is to pinch off about half an inch from the top of the plant when it has reached a height of six to nine inches, and to repeat the same operation 10 to 11 weeks after the time of planting, on all the stems of the plant.

VISIT TO RIVERSDALE.

On the 21st ultimo, we paid a visit to *Riversdale*, the beautiful estate of the Hon. *Charles B. Calvert*, near Bladensburg, in Prince George's county of this State. We had heard much of the laudable industry and well directed enterprise—much of the economy and skill practised by him in the improvement of his arable lands—much of the excellence of his *fine herd of Durham cattle*,—and, therefore, we expected to see much that would interest our feelings, and pleasurably excite our wonder,—but we are free to confess, that, great as were our expectations, the reality far, very far, exceeded our anticipations, sanguine as they were,—for knowing Mr. C. well from a reputation which he had honorably won as an enlightened agriculturist—and knowing too, that he had ample means—that he possessed every appliance—for carrying on the improvement of his farm, we expected to find that he had made his improvements upon the high-pressure system. In this, however, we were disappointed, as we found by inspection and inquiry, that his judgment had determined upon pursuing one of a different character—one which may be termed the golden medium—one based on *energy*—on *action*,— and which looking to the natural resources of his estate to furnish the materials for manure, enabled him to avoid heavy outlays in the purchase of fertilizers, thereby demonstrating by example, that lands may be improved with the means which they themselves can supply, and that all which is needed, is, that those means should be properly husbanded and judiciously applied. We have often made the remark, that more credit should enure to the man of moderate means who improves his land by its natural resources, than to the one, who, with a well filled purse, effects the same object by the expenditure of his eagles,—and, surely, if this proposition be true as regards the man of such means, it is at least equally so when we find a gentleman of large fortune pursuing the same course—when we find him content to attain his object by a slower, though equally sure process, than his resources would have justified him in attempting, because, the example which he sets is calculated to infuse a spirit of enterprise, and to assure success to the efforts of those less favored of fortune than himself,—and, because, the effect will be more diffusive, as it is calculated to encourage those into action, whose chief reliance must necessarily be placed upon stalwart arms, energetic hearts, and discriminating judgments. In thus expressing this opinion, we do not wish to be understood as conveying the idea that we condemn those who expend money in the purchase of *fertilizing* and *amending* agents—who take the shorter course to attain the goal of their desires; for knowing ourself as we do, did circumstances concur to justify us, the latter is the road we should travel, as from the native impetuosity of our disposition, we feel that we should prefer the rail road speed to that of the turnpike, —so that what we have advanced has allusion only to the influence which the course of Mr. C. is so well calculated to exert upon a very large class of landed proprietors, who necessarily have to be chary in their expenditures. Upon these, his success can but serve to call into activity all their dormant energies, and inspire them with that hope, which never yet failed to animate men to deeds of generous emprise, nor to crown their efforts with the success due to virtuous daring.

With there preliminary remarks, we shall proceed to give a faithful account of what we saw and heard.

Draining.—On the southern front of the mansion, contiguous to the lawn, there is a field of between 50 and 60 acres now well set in clover and orchard grass, from which a luxuriant crop was mowed this season, and a second crop is now growing. This field, a few years since, was a deep and almost impenetrable swamp, in which, in the dryest seasons, the cattle were mired, and, not unfrequently, had to be prized out. This melioration was brought about by a series of open ditches and covered drains, which collects and vents the water at all times, and by which an unsightly and unwholesome quagmire has been converted into a fertile meadow, adapted alike to the growth of grass and to every other product of the farm.

There is another field of about equal dimensions, which has been also drained, and about three-fourths cleared, which when completed, will be among the most productive fields on the estate, as its soil has been enriched by the decomposition of vegetable matter for uncounted years. The mode of making covered drains as practised by Mr. Calvert, is eminently worthy of note, as it is both economical and simple, and, therefore, cannot fail to commend itself to all who, like him, may consider it a matter of moment to achieve great ends at the least possible cost. After digging and graduating the drains, so as to ensure himself of their capacity to pass off the water into the open ditches, he fills them up with pine-boughs, to such a height as that they will not interfere with the operation of ploughing, and then covers up to the surface with the earth which had been excavated. From experience, these drains answer every purpose of more costly ones, and bid fair to endure for a quarter, if not the third, of a century. The facility with which Mr. C. has demonstrated, how easy a matter it is to make sound, dry, arable soils, out of inaccessible marshes, is as notable as praiseworthy,—and cannot fail, we should think, to stimulate hundreds of landed proprietors to reclaim lands of a similar character which they may have on their respective estates, and thereby enhance their value and secure their families against those autumnal diseases which make such inroads upon their constitutions and health.

The Mansion and Homestead.—The *Mansion* is one of those massy edifices which, at first view, impresses the beholder with the belief that it is *the seat of elegant hospitality, of refinement,* and of affluence.—The main building is 68 by about 50 feet, with an elegant *Portico* on its northern, and a *Piaza,* running its entire length, on its southern front, each constructed with due regard to classic and architectural propriety. Connected with the dwelling, by *corridors,* there are two *wings* of some thirty feet front, which add much to the beauty as well as the convenience of the edifice. On either front is an ample lawn with shade trees, grass plots, parterres, shrubbery, and flowers, whose effect upon the senses impart an interest to the view, warm the mind into admiration, and give assurance, that a chastened taste and artistic skill had presided while these were being fashioned into form. The *barn* is in keeping with the mansion, having, like it, its *portico*—it has a front of 80 feet, running back 40 feet, and combines in its arrangements every convenience, every accommodation, peculiar to such structures. These improvements were made by the present proprietor's ancestors, in the beginning of the present century, but are still in a state of the most perfect preservation—nor could they be otherwise, constructed as they were, of the best materials, by the most skilful workmen, and in the most substantial manner. Judging of the future by the past, we should presume, that they are destined to remain as monuments of the style and spirit of their age, for centuries yet to come.

The *Cow House,* is a plain, unostentatious building, constructed for *use* by the present owner, of sufficient dimensions to accommodate a *hundred head of cattle.* Its ventilation is such, that the cows have plenty of fresh air, at all times, while in winter, they can repose in their bedded stalls, and bid defiance to the pitiless storms without. It being the policy of Mr. C. to keep them warm, in order that the food with which he so abundantly provides them, may not be demanded to keep up the heat of their bodies, but appropriated directly to the purposes of elaborating flesh, bone, and muscle, and the secretion of milk. When in their stables, the milch cows are daily supplied with straw for beds, and are regularly curried and brushed down. The passages between the ranges of stalls are every morning, covered with saw-dust, by which means their liquid excretions are absorbed; and thus does Mr. C. preserve from waste, perhaps, the most valuable part of their manure; for, without wishing to detract from the intrinsic value of their more *solid* excremental discharges, we may be permitted to observe, that the former are so rich in those salts which enter into the nutriment of plants, that every farmer should avail himself of all the appliances within the compass of his ability to save them. Having ventured upon this suggestion, we may be indulged with the additional one, that a daily sprinkling of *plaster* over the saw-dust, would contribute largely in preventing loss by the evaporation of the most fertilizing portion of the liquid,—this we deem the more necessary, as from the moment the liquid is voided, an incipient stage of decomposition takes place, and, as a necessary consequence, the volatile gas, as formed, is exhaled, unless arrested by some *fixing agent.* Besides being the means of economising this important fertilizer, the action of the plaster would tend to sweeten the stable, and thereby promote the health of the stock.

The Herd of Cattle.—There are in all, of every description of cattle, old and young, on the farm, about 150 HEAD, a large majority of which are thorough bred Durhams, of the most approved families, peculiarly adapted to dairy purposes, being deep milkers. In their selection Mr. C. exerted a judicious judgment, without regard to cost where a superior animal was to be had, and it is but paying him a well deserved compliment when we say, that those purchased by him, as well as those which he has raised, attest alike correct judgment and skilful breeding.—We noticed among the herd, a thorough bred *Holstein,* and one, a cross between the *Holstein* and *Durham,* each of which bore evident marks of being large contributors to the pail. He has also an excellent *Alderney* cow, which does infinite credit to her race, in the production of cream-bearing milk.

At present Mr. C. has but between 30 and 40 cows in milk,—a large number of his herd being calves, yearlings, and heifers, now in-calf for the first time.

We were shewn a beautiful cow, a full-bred Durham, of fine size, and excellent milking qualities, which had given birth to her first calf when only 14 months old, she being but 5 months old when she received the embraces of her first love, and he a *youth* of but 6 months old. We saw, also their offspring, and for the life of us, we could not discover that the jejuneness of her parentage had in the least despoiled her of her fair proportions.

Mr. Calvert works several of his dry cows in the yoke, and he is decidedly of the opinion, that 4 of them are competent to perform as much labor as 6 oxen. We saw one of them in a team working with three oxen: we took especial notice of her bearing, and thought she took a more elastic stride than either of her fellow laborers,—and by the way it did not surprise us, for we have ever entertained the belief, that there was more integrity of purpose—more truthfulness—in the female than in the male sex, whether biped or quadruped.

Mr. Calvert is an extensive grower of roots: those which he raised last year, together with corn stalks, cut and *mashed* in a machine which he has for the purpose, comprised the chief food given to his cattle last winter; and he assured us, that they were not only sustained in good health, but, when turned out in spring, were fat enough for beeves.

It is worthy of note, that the cattle of Mr. Calvert

have no other pasture than such as they find in his *forests*, which goes very far to controvert the opinion which generally obtains—that Durhams can only be kept in flesh when fed on luxuriant pastures—for the herd of Mr. C. are in as good condition as we would desire them to be, were they our's.

Former and present condition of the arable Land.—When Mr. Calvert came into possession of his estate, the soil, from long continued cultivation of *Tobacco*, without the alternation of clover, had been reduced to a state of great poverty. But by a change in the system, rejecting the culture of tobacco, and adopting grass culture, he has been able to improve some 50 or 60 acres, each succeeding year, from the resources of his farm alone, so that *now*, where the *sedge* was formerly the solitary tenant, he is sure of a good crop of grass, 5 or 6 barrels of corn, or a good crop of oats. It being his desire to get the most of his 1200 acres of open lands in grass, he grows no wheat, but sows clover and orchard grass with oats. As we have before stated, Mr. C. incurs no expense in the purchase of mineral manures, but relies upon his *woods*, his *marshes*, his *cow* and *horse stables* and *saw mill*, to furnish the materials for manure. His saw mill furnishes, daily, a large quantity of *saw dust*, which is used, as before stated, in his cow stables, and there manipulated into manure; and, by the bye, adds much to the quantity.

The only *mineral manure* used by Mr. C. is the ashes made on the estate; but in this, we think he is wrong, as we believe that *lime* would greatly improve all the *dry clay* soil on his estate, and secure to it a largely increased capacity for production.

The Crops.—Mr. Calvert had 150 acres in *Oats*, and made a good crop, the Clover sowed with the oats is well set and looks well; he has now 150 acres in *Corn*, which promises to realize his most sanguine expectations: he has, and will have when his Rutabagas are all in, between 35 and 40 acres in roots, 20 of which are *Ruta-bagas*, a root to which he is very partial. His last year's stock of roots lasted until June,—and here it may be proper to remark, that his root houses are constructed of rustic materials, above ground, and that out of the many thousand bushels which he raised last year, he lost less than 2 cart loads, by rotting.

There are several acres in a *Pumpkin patch*, besides which, many acres of one of his corn-fields are occupied in growing the same vegetable.

Mills.—Mr. Calvert has on his estate a *merchant mill*, propelled by water, wherein he manufactures flour, and purchases large quantities of wheat from his neighboring farmers. He has also one of *Page's saw mills*, propelled by steam. At this he manufactures a large quantity of lumber for the Baltimore and Ohio Railroad, the timber being cut from his own forests. We saw a plank cut from a log 20 feet long, in 40 seconds, and a second one in 45 seconds. He has lately purchased one of *Coleman's fence-making machines*, together with the right for Prince George's County, and intends to go largely into the manufacture of that substantial kind of fencing—for which, we doubt not, he will find ready sale, as to great substantiality, it superadds much beauty.

Oaken Furniture.—We saw at Mr. C.'s several articles of furniture which had been made from *white oak* grown on his estate, and sawed at his mill, and which, for delicacy of shade, height of polish, and exquisiteness of finish, appeared in our eye infinitely more beautiful than any articles of mahogany furniture we have ever seen,—and certain are we, that in durability, and lastingness of color, the white oak will far exceed mahogany or any other wood. As we looked on these fine specimens of the mechanic arts, and reflected that they had been fashioned by American genius, and grown on American soil, the question presented itself to our mind: when our own forests present materials so rich in all the elements of beauty, and so serviceable withal—when our own mechanics are competent to mould into form articles at once so elegant and so utile, why go abroad? If we thought we could exert any controlling influence over Mr. C., we certainly would ask him to exhibit some of his articles at the *Fair* to be held in Baltimore, in October next, in order that others may enjoy the same harvest of delightful feeling which we did while examining them under his hospitable roof.

The Garden covers an area of between 5 and 6 acres, with an inclination and exposure to the South. It has been recently enlarged, but has at present only about 2½ acres in cultivation, which is well arranged, and well filled with the choicest vegetables and fruits.

We have sketched a hurried, and we fear imperfect account of what we saw while on our visit at Mr. Calvert's,—and in conclusion would remark, that we found in him a genuine representative of the old Maryland gentleman—learned, but devoid of the starch and pedantry of the schools—thoroughly educated in the science of Agriculture—entertaining broad comprehensive views of principles and theories, and possessing that happy power of applying them to practice, which is always desirable, but rarely to be met with. Having already said that he was "a genuine representative of the old Maryland gentleman," it is perhaps superfluous to say more, but we must be indulged with the additional remarks that he received and entertained us with the ease and grace for which that race of *true men* were distinguished throughout our country in the best days of the Republic—that his hospitality was as elegant as it was generous; that his bearing was so unostentatious, as to make us almost forget the relation in which we stood; that we realized that sentiment which fills the mind so pleasurably, when a man, though among strangers, feels that his *host*, in the kindness of his nature, is endeavoring to disembarrass his *guest*. In a word—if we did not mistake Riversdale for our own humble *home*, we had the evidence abundantly around us to prove, that we were where we had a heart-welcome. While we are thus permitting our pen to trace the impressions

made upon our mind by Mr. C., it must do willing justice, also, to his estimable consort, who stands unsurpassed in those becoming virtues and rare accomplishments, which dignify the character of a lady, elevate and endear the husband to the wife, and open the well-springs of love in the heart of the child. Long may she continue to preside, as now, the chief attraction—the concentrating point of affection—at her own beautiful Riversdale.

MANURE FOR TURNIPS.

The following mixture will make an excellent compost for an acre of turnips:

15 double horse-cart loads of mould or earth,
20 bushels of coal, or 15 bushels wood ashes,
4 bushels of bone-dust,
5 gallons of the *dregs* of fish oil, or the same quantity of oil.

The whole to be well mixed together, and turned over twice at intervals of three or four days.

Besides ensuring a good crop of turnips, it will improve the soil sufficiently to bear a rotation of crops.

In the preparation of the ground, we would plough twice—the first time 8 inches deep:—after harrowing, we would broadcast the compost evenly, plough it in 4 inches deep, harrow and cross harrow, so as to render the tilth perfectly fine,—then sow the turnip seed, harrow it in *very lightly*, and complete the work by rolling the ground. The after culture we would manage as directed last month.

SUBSOILING.—Of the advantages which would result upon a *dry, sound soil* from subsoil ploughing, we do not entertain the shadow of a doubt. The expense of such method of preparing land we know will be looked upon as an insuperable objection by many. True it will cost double to prepare land in this way, but then, as it will increase the product the first season fully twenty-five per cent., or even more, the extra expense will be brought back with compound interest, so that the culturist will be the gainer even in the first crop to say nothing of the superior productive value of his land throughout the remaining years of his course of rotation. A very important advantage results from subsoiling and preparing it for purposes of culture, and thereby enabling the culturist to *deepen* his surface soil without the least danger of detriment.

A letter to the Editor, from a gentlemen in Fluvanna county, Va., forwarding the subscription money for volumes of the Farmer, says:

"By promoting the circulation of your paper, I feel that I am giving aid to the advancement of agriculture, and will continue my efforts to obtain subscribers, and hereafter may add my mite to the cause of agriculture by giving you some account of the farming in this section of country.

I am very truly yours."

We shall be gratified to hear from our respected friend, on the subject noted, or any other which may be of interest to the agriculturists of that section of the Old Dominion.

FREDERICK COUNTY.—A letter to the Editor from Mechanics Town, Frederick county, Md. says:

"Enclosed I send you $5—please send to this office six copies of the American Farmer, a paper which every man of the farming community should subscribe for."

NORTH CAROLINA.—A friend at Gardener's Bridge, N. C., sending us an order for 13 copies of the Farmer, remarks:

"Please send the Nos. above named to my address at this office, and I will try and keep up this number and gain more by another year if I can.—For to convince any one that yours is a valuable paper to the agriculturist, he has only to read and study it. With my best wishes for success to your efforts in so good a cause, I subscribe the name of your friend."

MISSISSIPPI.—A subscriber in Mississippi, in forwarding his subscription, for vol. 4, and the name of a new subscriber, remarks:

"I am very much pleased with the spirit of the editorials and correspondents; though most of the subjects written on are much more interesting to northern than southern farming, yet I feel fully paid for my money, and am always pleased to receive the Farmer. The spirit of the writings, the economy in the management of the correspondents, on their farms, the new views connected with the most common subjects, and the great labor saving of the northern correspondents, all of these help to arouse a spirit in us of the south, and cause us to reflect what we can do."

LOUISIANA.—A subscriber in Louisiana, remitting the subscription money for several subscribers, adds:

"I can say, now that the year is closed, that the dollar I paid for the late volume of the "*Farmer*" has brought me as much real gratification as any other dollar ever did.

"Wishing you health and prosperity, I remain,
Yours, with respect."

PRESERVING FIGS—CHEROKEE ROSE—OSAGE ORANGE.

MEACON, *Mississippi, June* 23d, 1848.

To the Editor of the American Farmer:

SIR,—Respecting the enquiry made in your May No. in regard to the preserving of Figs, I have been looking to with considerable interest, and hope soon some of your correspondents will answer the enquiry. In regard to the propagation of the Osage Orange, I now have a fine thriving little nursery, having obtained half pint seed from your townsman, Robert Sinclair, Jr. the last August to experiment on; I see that every leaf has quite a formidable thorn; as yet I have not tried the experiment to see if the *stock will* browse on it, but I fear they will while young. The Cherokee Rose, from my experience, will make a fine hedge in three years, but requires some little work the first and second year only, but will sport its branches very much, and requires pruning at least twice a year—I think it hard to keep in bounds, although stock will browse on its tender branches in the winter and spring, sheep in particular,—but when once well rooted the browsing appears to increase its growth as well as branching, &c.

Wishing you every success in your very laudable undertaking, I subscribe myself yours, truly,

M. MAHORNER.

For the American Farmer.

THE EMPIRICAL AND THE RATIONAL SYSTEM OF AGRICULTURE.

The former may be compared with the old mode of navigating the sea, by coasting: and the confidence of its adherents is like the boldness of the "quack," who prescribes a medicine of which he is ignorant for the relief of symptoms, originating from causes that he cannot even enumerate.

The fortunes of "quacks" are frequently referred to as remarkable; but the sum annually expended in nostrums for the improvement of soils in Maryland, would support all the quacks in the United States.

Every year brings some new plan that appears plausible, or some modification of an old one, that has nothing to recommend it but the experience of some half a dozen men.

There are, perhaps, no branches of science that promise more important results than those recently applied to agriculture. We have many facts that appear as interesting and important as the discoveries of Franklin, Davy, and Henry; but they want the genius of a Watt, or a Fulton, or a Morse, to apply them.

It was only necessary to state the fact—that Electro-magnetism was applied to telegraphic uses, and every one knew how it was accomplished—could describe the apparatus, and wondered that it had not been used years before.

The expectations with regard to agricultural chemistry, are like those entertained of general chemistry in its origin: every dabbler who sought for some *one* principle (or stone) that would convert *every* thing into gold, was called philosopher or alchemist. Some fertilizing liquid—some rule to improve worn-out lands—some electric wire—is constantly produced or promised, that adapts itself to every soil and produces a double crop. The appetite of the public for these "humbugs" is excited, and must be gratified.

There are two modes by which the best systems are ruined. The first is neglect; the second "ultra" views and expectations. The latter has been the prevailing error on the application of chemistry to agriculture; and many men, of sound minds, are turning away in disgust; or, having sifted the matter more thoroughly, discover the elements of a rational system of agriculture, and have determined to develope them by the establishment of agricultural schools and the analysis of soils. It may yet require years of patient investigation; but these years will be shortened, if the investigation is made by men trained for the purpose, aided by those who are familiar with what is already known, and skilled in the application of this knowledge.

It was said of the immortal Louis, that, after devoting 10 years of his life in the hospitals of Paris to pathological investigations, he burned up what he had written, that he might, with an unbiassed mind, look again at the results of disease, and present to the world facts (statistics) that were not selected for the support of any theory, but for the exhibition of truth.

If he was stimulated to so much self-denial in collecting facts from the changeable materials of the human system, what should be the zeal of the agriculturist who has any pretensions to science, when he beholds the fixed constituents of the inorganic world, and sees the interest that is exhibited in every country in determining their relation to the growth of plants which can be scanned amid the health and beauty of a country residence.

The opinion of Liebig, with regard to the effects of Plaster, (sulphate of lime) or Davy or Ruffin, of Lime and Magnesia, or Johnston, of Soda and nitre, is quoted with as much confidence as if they were oracles. Their theories do harm; they contain some truth, no doubt; but these men, who have risen above their age, describe objects beyond them, of which they have but an indistinct outline; and these objects often "loom long." They attempt to anticipate the discoveries which will soon be made. The world will ever be indebted to them for their research and the value they have given to previous discoveries by the application of them. There are but one or two minds in an age that can grasp the materials already collected; and these men should be satisfied in having done this. It remains, now, for another period of patient research to build up and perfect this beautiful system. The base of the pyramid has been laid, and no power or machinery is sufficient to elevate the superstructure: a "tumulus" must be built around it by the patient labor of many; and when, by means of this inclined plane, the noble blocks are laid in their places, the mound may be removed, but the monument remains a pillar of truth. This tumulus or mound represents the mass of facts (statistics) that we want—not to build up *any particular theory*, but to elevate the materials for the *rational system of Agriculture*. D. S.

—

Mr. Editor—In your last number you have honored me by the publication of a letter on the use of Lime and Magnesia. (See No. for July, 1848, p. 9.) The sense of my 6th proposition is entirely destroyed by the substitution of the word "*gases*" for the word base, in several places *in that paragraph*: and on the same page, 8 lines from the bottom, the word "national" is printed instead of rational system of agriculture. In your review of my letter, you say "The Dr.'s experiment was *not fairly* made, owing to the tenant on his farm being unwilling to haul out the lime, &c." Now, as my argument is based on the application of about 5000 bushels of lime, from different sources, to a soil that did not require it; and as the tenant is one of the best farmers in the State, and was anxious to have lime, until the experience of several years convinced him that a *further application* would waste my money and his labor, I hope you will insert this, in justice to him, particularly as I referred in several places to its application.

As you think the lime was "*imperfectly*" applied, (where applied at all) I will, on my next visit, take a sample of the soil from each field. Their analysis, *now*, will show the proportion of lime and magnesia added to each acre, when compared with those fields not dressed with lime.

Very respectfully, your ob't serv't,
DAVID STEWART, M. D.
No. 77 N. Eutaw st., Balt., 24th July, 1848.

CULTURE OF THE VINE.

To the Editor of the American Farmer:

SIR,—The cultivation of the Vine, and the fabrication of American Wine, has now, without doubt, secured the interest of the people of the United States, and many of our ablest agriculturists, are warmly engaged in the pursuit. This interest of our country, I consider now safe—and must progress. We are now making *superior Wines*, and so far, the important question of *production*, is settled—but more than

this, we are now delivering a favorite liquid to the public, without *adulteration*, *pure* and wholesome.—With the flagrant proofs before the country of the abominable and dangerous adulteration practised by European producers of wine, it is astonishing that men of common sense, and with a common regard for health and life, would use the second and third rate wines, imported, and even our own base fabrications.

It is now time to settle, from practical experience, if it can be settled, two essential points in the cultivation of this fruit, viz: the best mode of *training* the vine in a *vineyard*, combining economy with the perfection of the fruit—and the *depth* at which a vine ought to be *planted*. It is certain that these are two essential points, in the cultivation of the grape, and by no means conclusively settled. Some acknowledged able cultivators of the Vine, contend for depth in planting, while others are for placing the vine, in the setting of a vineyard, at a moderate depth.

"Hoare," who is now highly popular authority, says expressly, that in planting the vine "dig a hole two feet deep, to be filled up with prepared earth, to *within nine inches* of the top, when the vine is to be inserted." In opposition to this theory, a practical writer of high authority, at Cincinnati, where the vine is extensively cultivated by foreigners, as also by our own citizens, states distinctly, as the result of experience, that the *duration* of the vine depends on the depth *at which it is planted*. These facts loudly call for a settlement of the question, of what is the proper depth at which the roots of the young vine ought to be planted, when planting out a vineyard; and it will be conferring a public benefit, by any individual to communicate to the public on this point, where his practical knowledge justifies his communication.

To any careful observer, of a practical knowledge of the vine, it is evident, there are arguments to be produced on both sides of this, now, a question, and it is a little remarkable that in all the public discussions that have been given to the country, so little has been said on both of the foregoing points. It is a certain fact, that the *production* of the *fruit* of the *vine*, as to *quality*, in great degree, depends on the access it has to the *sun* and *air*. Mr. Hoare distinctly points out the effect of the atmosphere on the *growth*, and consequently on the *fruit* and its *juices*—and universal practical experience, I believe, will endorse his theory.

Among the cultivators of the grape in the United States, for the purpose of fabricating wine, several modes of training the vines have been adopted. It is believed that among the best wines produced in the United States, Virginia, say in the vicinity of Richmond, and Cincinnati, stands with the foremost. In training the vine, or supporting it while growing and producing fruit, the Virginia cultivators, it is stated, keep in view the advantage of *perfect ripeness* of the fruit, and for this purpose adapt the *trellis* form, with the aid of which, they spread the *shoots* of the vine, giving not only to them, but every bunch of fruit all advantages of sun and air.

The Cincinnati cultivators, I believe, generally practice the usual French mode of tying all up to posts, six to eight feet in height.

To this last plan, a strong objection I think exists, if producing grapes of the *richest juices* and *finest aroma*, is the object. The mass of leaves and shoots that accumulate about the time, and indeed, before the grape is ripening, must necessarily, if tied up to the posts, exclude both the sun and air, from parts of the vine and fruit. In this climate the astonishing growth of the shoots would render it difficult to tie them up to the same post on which the bearing wood and fruit were, without excluding many parts of the vine and much of the fruit from the benefit of the sun and air. I think it will not be doubted that if the different shoots allowed to grow through the season, can be so tied up as to admit the rays of the sun and the air to pass freely through them, it must be the mode best calculated to produce the most luxuriant growth of the vine and the richest fruit. It is worthy of remark also, that in the Viginia mode of training their vines, the shoots left for bearing have that oblique position given to them along the trellis; that allows the bunches of grapes to hang detached and clear of the vine, fully exposed.

It would be highly gratifying to a number of cultivators of the grape in Alabama if some person acquainted with the Virginia mode of training and cultivation, as also the depth deemed most favorable for planting the young vines in setting out a vineyard, would give a distinct detail of the whole—adding, for the first to the fifth year, the important item of *pruning*. It is full time for the American people to determine on supplying themselves with the wine that the consumption of the country demands. This determination with every rational well wisher to his fellow citizens, independent of the interest of his country, has now become imperious when the indisputable recollection is admitted, that we almost, never, get a drop of wine from *abroad*, that is not either *mixed* or *adulterated*, especially the latter, (a fact which Europeans themselves have humanely told us) and adulterated with drugs, rendering the liquid hostile to human *health* and *life*.

SOUTH.

[The above is from an Alabama correspondent.—We hope some of our subscribers in Virginia, conversant with the subject, will respond to his request.]

TANNER'S BARK MANURE FOR CHERRY TREES.—The editor of the *Boston Cultivator*, in a description of the farm of Messrs. A. D. Williams & Son, of Roxbury, gives the following account of that gentleman's management of Cherry trees:

"Spent tan, fresh from the tannery, about a horse load to each tree, once in three or four years, is used for all cherry trees without exception, and it is regarded as the best manure, reviving old decaying trees, and giving a healthy, rapid growth to those in their prime. This tan is spread under the tree, mostly around the trunk. As an evidence that its valuable effects are not merely mechanical by retaining moisture, like any litter, on opening the tan the fibrous roots of the cherry are found penetrating the tan in every direction. Some coming directly up into the tan, where it is laid above the large roots of the tree. In some places where the winds have blowed off some of the tan, numerous roots may be seen.

This opinion, so highly in favor of the use of tan as manure for the cherry, is given after many years experience and on many trees. The soil is a strong loam.

This valuable discovery was made by some ancestor in the family, who had dug out some rocks, leaving an unsightly spot, which he filled with spent tan, and earth, and some cherry trees came up there and grew with uncommon vigor. As tan, in its fresh state, is generally injurious to vegetation, we advise caution in its trial, lest the trees suffer by injudicious doses. We may use too much of a good thing."

ADVANTAGES OF DRAINING LANDS.—Sir John Sinclair, who is one among the best authorities, thus sums up the advantages of *draining arable land*:—

"When it is thoroughly drained, land can be ploughed at any season with advantage—it is easily managed, and can be kept clean at a moderate expense,—every exertion of good husbandry is attended with success,—the ground suffers less from the inclemency of seasons,—the produce is generally ample,—the quality of the grain is excellent, and the farmer will thrive, where his predecessor, cultivating a wet and undrained soil, was impoverished or perhaps totally ruined."

Again, he says:—

"By the removal of stagnant water, and the prevention of noxious exhalations, the climate is rendered more healthy and genial, both to animal and vegetable life. Indeed, since the introduction of draining into this country, *agues* and other similar distempers, occasioned by the humidity of the soil, and the consequent impurity of the atmosphere. have been, in a great measure, prevented, and the general health of the inhabitants has been greatly improved."

Of WET LAND he remarks:—

"While land remains in a *wet* state, the manure laid upon it, whether *putrescent* or *calcareous*, *is, comparatively speaking, of little use;* the seed sown *often* PERISHES; the *crops* are *sickly*, and later of ripening; and the operations of harvest are perhaps attended with injury to the soil, uncertainty and danger."

Upon the application of manure to drained lands, he has this precaution:—

"Care in particular should be taken to *render the lands dry* before the application of *lime, dung* or *compost*, otherwise the attempt will be ineffectual."

For the American Farmer.

IMPROVEMENT OF LAND.

Some time ago it was stated in the papers that the American Peace Society had offered a considerable sum as a premium to the individual who would favour the world with an essay on the origin and cause of the late war with Mexico, and the probable result. An individual put in boldly for the prize as follows, with what force of reasoning, I do not pretend to determine.

1st. Origin and cause of the war—Texas.

2d. Result of the war—Taxes.

Now, friend Editor, in noticing the very liberal premiums offered for the best essays, not to exceed 10 pages in length, on the renovation of worn out lands, I was induced to believe that one might be prepared not quite so brief as the above, but contain the whole matter as it were in a nutshell—something like the following:

Borrow some money if you can, if not, sell a part of your land, for money you must have as a starting point to renovate worn out land.

Clear your ground of all bushes and stones.

Plow thoroughly and reduce it as much as possible.

Then put on Lime at the rate of 50 bushels per acre for corn.

Then Bone at the rate of 10 bushels per acre, for oats.

Then Guano at the rate of 200 pounds per acre, with all the manure that can be made from the fodder and straw, for wheat.

Give it a liberal supply of grass seed, and the thing is done, as I know by EXPERIENCE.

SALT AS A PREVENTIVE OF RUST.

Sir *John Sinclair*, one of the best agricultural writers that England has ever produced, has the following remarks upon the subject; and as the season is approaching to test, by experiment, the value of the suggested preventive remedy against one of the most formidable enemies of the wheat crop, we copy it, and would be pleased that several wheat growers would give it a fair trial and report the results of their several experiments. In his "Code of Agriculture," he says:

"*It (Salt) has a tendency to prevent Rust or Blight in Wheat.*—In the course of a most extensive inquiry into the causes of the rust or blight in wheat, and the means of its prevention, it appeared that Mr. Sickler, a farmer in Cornwall, was accustomed to manure his turnip land with the refuse salt from the Pilchard fishery; and that any ground thus treated, *was never liable to the rust or blight*, though it infested all the neighborhood."

"This important circumstance is confirmed in a recent communication to the author, from the Rev. Robert Hoblyn. He used 1 ton of old salt, with 1 ton of fresh fish, mixed with earth, and from 20 to 30 tons of sea sand, and his crops, he states, were always good, *and never infested with rust.*"

"it is probable that the salt is the only article in this compost that could be of material service in preventing the rust, by its checking putrefaction, the result of too frequent a repetition of corrupted manures. It is well known that the rust does not attack plants in a state of perfect health. Its general cause is, the over-fullness, or over-luxuriance of the plant, from its being glutted with rank and unwholesome food."

CURE FOR SNAKE BITE.

☞The following, says the Frederick Examiner, we find in a paper published in 1831, which we re-publish by request:

An effectual Cure for the Bite of a Snake.—Last summer, a black man, in Frederick county, was bitten on the finger in the corn house about dark by a snake, supposed to be a copper head, from the fact that one was killed the next day under the house. Immediately his arm swelled to twice its ordinary size. I applied first the breast of a chicken cut open—next a large vial of whiskey—to the wound. We also bathed the arm and hand frequently during the night, and the next day until 10 o'clock with salt water, without any visible abatement of the swelling. At that time a physician arrived, and immediately sent for the root of the yellow poplar tree, (more properly called the American tulip tree;) he had a strong decoction made of the bark, washed the swollen part with it frequently, gave the patient a half pint every half hour, and applied the bruised bark which was boiled as a poultice. The relief was almost instantaneous, the swelling soon subsided, and the pain, which was very excruciating, in a short time ceased altogether. The Doctor assured me, that had it not been for this simple remedy, the man would not have lived many hours; and I am convinced from what I saw, that had it been applied in the first instance, the suffering would have been very light. I wish this remedy to be generally known, as it may save the lives of hundreds.

JAS. JOHNSON.

PRESERVATION OF THE ELM.

BELGRAVE, June 29, 1849.

To the Editor of the American Farmer:

DEAR SIR:—In May last, I found recommended in the "Baltimore American," tobacco juice as a cure for the disease with which the Elm is being attacked in some parts of the country. As the paragraph alluded to was not sufficiently minute, I take the liberty to enquire of you more particularly on the subject. You will much oblige me by informing me, at your convenience, what proportions of tobacco and water should be used in forming the juice; what quantity should be applied to the tree, and in what manner; also at what period of the year.

I have for three years been a reader of the "AMERICAN FARMER," and it affords me much pleasure to say, I regard it well worthy of being patronized by the agricultural community.

Very respectfully,
Your obedient servant,
WM. S. PETTIGREW.

REPLY.

It gives us pleasure to reply to our esteemed correspondent from North Carolina, by saying that 15 lbs. of Tobacco will make a hogshead of tobacco juice sufficiently strong to prevent the Elm-worm from destroying the leaves of his trees, and that after the first decoction is used, half the quantity by being added to the first quantity will answer. The decoction should be thrown over the tree so as to wet the leaves. A large garden syringe, where the trees are not too large, will answer—where they are large, a garden engine will be required to throw the juice with. Twice a season is sufficient—spring and midsummer. By examining under the tree in the months of *May* and *June*, the worm which destroys the leaves will be found in thousands and may be easily destroyed by being swept together and killed, *the pressure of the foot*, or the *excitement* of *boiling* water gives them their quietus most effectually. All the leaves which are destroyed and fall to the ground should be wept together and burnt.

MISSISSIPPI LAND—DITCHING.

To the Editor of the American Farmer:

The country in which I reside is prairie in considerable bodies, a high level or gently undulating country, very rich, and adapted to cotton, corn, oats, wheat, &c.

We ditch here on a different plan from any I have ever seen elsewhere. In the centre of the bottom we run two furrows parallel to each other, eight feet apart, of the length we wish the ditch: between these furrows, when the ditch is finished, is the embankment. On the out side of these furrows, for three feet wide and one foot deep, the earth is drawn inwardly, which makes the embankment; the ditches are then three feet wide and one foot deep on each side of the embankment; the rows of cotton or corn point down the ditch at an angle of forty-five degrees, with the ditch on each side, and the middle or water furrows are opened into the bottom of the ditch. From the above, you see the embankment is not only out of the way, but upon it we plant two rows of cotton or corn; the ditch being shallow, serves for a turnrow: the mouth of each water furrow being open, there is no place for the water to stop, and there is no ground lost for turning.

Yours, W. B. WILKES.

Okolona, Miss., June 26, 1848.

CAPE MAY COURT HOUSE, N. J., June 25, 1848.

To the Editor of the American Farmer:

The following names I have procured as subscribers to the American Farmer. * * * * *

I am so pleased with the work, and it is so well adapted to our latitude, that it affords me pleasure to recommend it to as many agricultural friends as possible.

Enclosed I furnish a couple of heads of grass,* which, to me and our people, are new. Please examine them, and say what they are and from whence they came. This is the first year that I have ever noticed it; and as it is quite abundant, so that I can cut several loads, I should like to know something of its worth.

The blade and general appearance of it, when standing, resembles timothy very much; and I am ready to believe my stock are equally fond of it.

I am truly yours,
RICHARD C. HOLMES.

* The heads of grass enclosed to us appear to be the *sweet scented vernal* grass, which is highly esteemed as an early pasture grass, and said to impart a delicious flavor to butter. Cattle are very fond of it. It does not, however, rank as high as a nutritive grass as many others, although, from its earliness and fine flavor, it is considered of great value for dairy purposes.

HORTICULTURAL.

WORK IN THE GARDEN.

Cabbages.—You must avail yourself of the first rain in this month to plant out your *Savoy*, and other cabbage plants—plant them at 2 feet apart each way, and if your bed is well manured and prepared they will form good heads by November.

Spinach.—Prepare your ground and sow spinach seed, they will be fit for the table in September.—This excellent vegetable should have a place in every garden.

Radishes.—In the early part of this month sow seed of short-top and salmon radishes. Towards the latter part of the month sow seed of the black and white spanish varieties, for fall and winter use.

Turnips.—In the first week of this month sow a bed of turnips.

Celery.—Early this month set out your celery plants.

Small salading of all kinds.—Seeds of these should be sown at intervals of a week apart during the entire month.

Green Peas.—At any time before the 1st and 15th of the month, you may plant a bed of the *Early Frame*, *Hotspur*, or *Golden* Peas—and if the season proves good they will be fit for the table the latter

part of September. Soak the seed 5 hours before planting.

Kidney Beans.—These may be sown any time between this and the middle of the month. If the weather proves dry water them, and you will have beans either to pickle or for the table. The seeds should be soaked the over-night, and should drought occur, water the rows to encourage their germination.

Endive.—Tie up those which may be full grown—and sow seeds for a new crop.

Weeding.—Have all your beds thoroughly cleaned of weeds, and work such vegetables as may require it.

Budding.—Peaches, Nectarines, Apples, Pears, Cherries, Plums may be budded early this month.

Herbs.—Medicinal and pot-herbs should now be cut, and after being dried should be tied up in convenient bundles, and wrapt in paper, to be ready for winter use.

If you have not supplied your garden with herbs, you may set out this month, such as *Sage*, *Rue*, *Lavender*, *Thyme*, *Hysop*, and *Winter Savory*. Keep them watered in dry weather.

Asparagus Beds.—Those that have been recently set, should be relieved of all weeds and grass, but care must be taken in working them not to injure the plants, crown, or roots.

Beds which are matured, and from which asparagus was cut last spring, and which have gone to seed, should have the stalks cut down to within a few inches of the ground, as the ripening of the seed exhausts the roots, abstracts much of their vigor, and consequently curtails the size of the succeeding year's crop. The seed stalks being mowed off, let the ground be carefully weeded and worked.

Sowing Strawberry Seed.—If you have been so fortunate as to have saved some strawberry seed from fine fruit, sow them thinly on a spot on a loamy border, which should be well prepared, by manuring, careful digging, and thorough raking. The tilth being made as fine as possible, lay off drills 1 inch deep and 12 inches apart, cover with the mould and finish by raking gently and smoothly, and patting the earth down with the back of your spade. Should the weathar prove dry, *you must water every other afternoon, about sundown*. In about eight weeks these plants will be fit to set out in the bed intended for their permanent occupancy, which should be prepared by thorough manuring, nice deep spading, and as nice raking. Sub-divide these beds into apartments 4 feet wide, with alleys 2 feet wide between each. Set the plants out in rows 18 inches wide, the plants 12 inches asunder; be careful to lay straw or tan between the rows, and to water them freely in dry weather until the plants become set and commence growing. Strawberries delight most in a strong loam and open exposure. No garden should be without this delicious fruit, as they are as healthful to the body as grateful to the appetite.

There is one species of ambition in which farmers may indulge in, that is so allied to virtue as to be virtue itself—we mean the ambition of excelling each other in their gardens—not only in the quantity and quality of the vegetables and fruits grown therein, but in their general arrangements, plans and forms of beds and borders, and in the beauty and display of shrubbery and flowers. And this ambition we desire to see so cherished, that ere many years shall have elapsed, every farm house in our land shall have a garden of which its owner may well be proud. Having expressed this sentiment, we will close our monthly converse, by the tender of our warmest hope that peace, prosperity and happiness, may take up their abode beneath every roof wherein may dwell a husbandman and those entitled to his support.

FLORICULTURE.

WORK FOR AUGUST.

Prepared for the Amer. Farmer, by Saml. Feast, Florist.

Geraniums should be cut down if not done before, and placed in half shady situation, until they begin to grow, when they should be repotted in rich loamy soil.

Chrysanthemums will require repotting in larger size pots; nip the top of the shoots, as they advance in growth, to make them strong and bushy plants.

Orange and Lemon Trees may still be budded.

Calla, Oxalises, and the different species of cape plants, should be repotted the last of this month.

Carnations and Pinks may be layered this month.

Camellias—give attention to the watering and syringing of these. Inarching, grafting, and budding, may still be done.

Chinese Primroses, from seed, should be potted off the last of this month.

Mignonette and Schrizanthus Seed may now be sown for blooming in winter.

Stock Gilly Flower for spring bloom should now be sown.

Dahlias—Keep these neatly tied to stakes as they advance in growth.

Greenhouse Plants—repot such as need it, and give attention to giving supplies of water in dry weather.

RELATIVE PROPORTION OF DRY STRAW, TO STRAW CONVERTED INTO MANURE.—The following remarks of Sir John Sinclair upon this subject are worthy of note:

"It appears from the statements of several eminent farmers, that *one ton of straw*, if properly manufactured, that is augmented in weight, by the dung and urine of the stock maintained upon the farm, will produce from *two*, to even *four tons of manure*; and as an English acre of grain, yields more than a ton of straw, hence on a farm where 300 acres are sown yearly, nearly 100 of them may be manured from its own produce, at the rate of 12 tons per English acre, without the aid of extraneous substances, provided the four course rotation be adopted."

Cause of the Gapes in Chickens.—The cause of this disease is stated to be the use of filthy, sour diet, and drinking from dirty puddle water, with putrid decaying substances. The symptoms are gaping, coughing, and sneezing, dullness and inactivity, ruffled feathers, and loss of appetite.—*Me. Farmer.*

METEOROLOGICAL TABLE,

From the 19th of June to the 21st of July.

Kept at Schellman Hall, near Sykesville, Carroll county.

Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock.

	Wind.			Temperature			Remarks.		
20	w	s	s	71	83	78	Cloudy	Clear	
21	w	w	w	66	80	79	Cloudy	Shower	Clear
22	w	w	w	61	73	73	Clear	Rain 1-8 in.	Clear
23	s	sw	w	65	85	75	Rain 1 in	Clear heavy gust 1½ in	
24	w	w	w	68	78	75	Clear		
25	w	sw	sw	65	83	76	Clear		
26	w	w	w	62	86	80	Clear		
27	sw	sw	sw	70	79	79	Clear		
28	w	w	w	73	88	82	Clear	Gust 1 1-8 in	
29	w	w	w	73	84	78	Clear	Gust	
30	w	w	w	71	80	78	Cloudy	Clear	
1	w	w	sw	72	85	80	Clear	Cloudy	Gust 1 1-4 in
2	w	s	sw	67	82	78	Clear		
3	w	w	w	72	78	74	Cloudy	Rain 1-8 in	
4	w	w	w	65	73	70	Clear		
5	w	w	w	60	78	75	Clear		
6	w	sw	ne	67	70	68	Cloudy	Rain	
7	ne	ne	ne	60	64	63	Rain 1 7-8 in	Cloudy	
8	ne	ne	ne	57	60	58	Cloudy	Rain	
9	ne	nw	nw	60	70	70	Rain 1½ in.	Cloudy	
10	e	sw	s	62	79	77	Cloudy	Clear	
11	se	s	w	72	79	72	Fog, Clear, heavy storm 1½ in		
12	w	se	sw	71	80	77	Cloudy, heavy gust, 5-8 in	Clear	
13	w	w	w	68	78	68	Rain 5-8 in	clear gust 2-8 in	clear
14	w	w	w	65	83	76	Fog	Clear	
15	w	w	w	71	82	76	Clear		
16	w	w	w	65	75	70	Clear		
17	w	w	w	56	76	68	Clear		
18	w	w	w	57	78	76	Clear		
19	w	w	w	61	81	78	Clear		
20	w	sw	w	65	83	78	Clear		

THE PLOUGH, THE LOOM AND THE ANVIL.

AFTER thirty years of earnest endeavors, by all the means at his command, to improve the practice of American Agriculture, and to raise it in the public estimation to a standard commensurate with its true dignity and importance, and without necessity during a great part of that time to feel personally much care about the pecuniary results of his labors, the undersigned now finds himself thrown, for the support of his family, exclusively on the patronage which his countrymen may be pleased to bestow on his future exertions in the same cause.

The time having just expired for which he was engaged to conduct the Farmers' Library, at New York, he has purchased that establishment, and now appeals to his old friends, and alas! in too many cases, to their sons and successors, to aid him in extending its circulation. It will hereafter be published in Philadelphia—on account of the proprietor—by that well known, enterprising, and popular house, G. B. Zieber & Co.; but to indicate its more comprehensive aims for the future, it will appear under the title of "The Plough, the Loom, and the Anvil;" for, while the Editor assures its patrons that practical agriculture will continue, as it has done through his whole life, the leading object of his inquiries and solicitude; and while he engages to keep them advised of all real improvements for its benefit, a sense of duty to those who follow it will impel him to have constant regard to their connexion with all the other industrial pursuits of our own country; being firmly persuaded that in the number of these, their proximity, and well doing, is to be found the surest and most stable foundation for the prosperity of American agriculture.

The immediate and ever-increasing tendency of a national policy which shall thus encourage American labor, generally, will be to raise up everywhere thriving and prosperous consumers of the fruits of the soil, instead of dispersing far and wide those who cultivate the soil, until, in process of time, their lands in the Far West shall be exhausted, and themselves ruined in the new States, as their fathers have been in the old, by loss of time and expense of transportation over the bad roads that always belong to sparse populations, leading to distant markets already overstocked. Until we can have such a policy thus widely spread and thus deeply rooted, not in the ephemeral success of a party, but in the mind and affections of the nation, it will be in vain for the friends of agriculture to go on recounting to farmers how large crops may be made on small spots of land and great masses of fat accumulated upon single bullocks. In vain will it be to tell, again and again, how to make the most fragrant butter; how to ensure the most perfect fruit; how and when to sow and to reap! In vain will societies go on exciting at long intervals a fitful and transient spirit of emulation by the award of silver cups and paper diplomas, if all the time we fail to encourage, in proximity to the plough, the growth of thriving, industrious, and happy communities, to consume the products of the plough; laboring men and women, in all the other great branches of industry, who, being able, will ever be ready to consume our cotton and sugar, our butter, fruit, corn, meat, vegetables, and all the various productions that the most improved agriculture and horticulture can supply.

It is worse than idle to talk about the admitted value of more intelligence for the landholder in the prosecution of his business; what he first needs for all that his land can be made to produce under the highest improvement of which it is susceptible, is to have stable and reasonably remunerating markets near at home, that he may save for the improvement of his land—his great machine of production—his manufactory—the time and the substance which are now wasted on the road and forever lost, in the act of searching for customers to take his produce at whatever it will bring. Let the demand be created, and the supply of intelligence, as of all other things, will follow as a matter of course. With increase of reward, and with that only, will come discovery and a general increase of knowledge; and with general and well remunerated increase of intelligence will come a general improvement of the soil, and with it wealth, population, education, power, civilization, and peace; and hence arises, in our judgment, the duty to show, as far as we are capable, the natural and mutual dependence which everywhere subsists between the Plough, the Loom, and the Anvil—between the farmer who digs his corn and the ironmonger who digs his ore, and the miner who digs his coal out of the ground—to the end that all the industrial employments of our own country, being bound together by one common interest, may each one give its influence to the maintenance of a policy conservative of the common welfare of all. To this end, then, friends and followers of the plough, will be directed the future labors of one, in whose writings, such as they have been for thirty years, in behalf of American agriculture, you have never seen, nor ever will see, a line written for narrow party purposes.

In England the friends of free trade have generously bestowed on its advocate, Mr. Cobden, for a few years of "agitation," $350,000. The undersigned has passed, since his establishment of the first agricultural journal in our country, not a short lifetime in agitating for the rights, the improvement, and the elevation of the landed interest; yet, far from seeking here anything in the way of gratuity, he only asks those who may be kindly disposed, not to "take it out" in wishing him success, but that they will do him the favor, which will be gratefully acknowledged, to exert their influence, at once, in obtaining substantial support for "The Plough, the Loom, and the Anvil;" which, in view of his resources, and the assistance on which he can rely, the undersigned has not the least hesitation in saying, will be worth its cost to the subscriber, meriting to be patronized and read, not only by every cultivator of the soil, but by all who would understand the true foundations of public prosperity.

The TERMS are, $5 for two subscribers, or $2 each where five unite and send $10.

Address J. S. SKINNER & SON, or G. B. ZIEBER & Co., Philadelphia.

AGRICULTURAL AGENCY.—J. S. Skinner & Son, (F. G. Skinner,) Editors of "The Plough, the Loom, and the Anvil," offer their services to their friends south of the Delaware, and to the public generally, as agents for the sale of land, and for the purchase in Washington, Baltimore, Philadelphia, New York and Boston, (as may be most eligible and most convenient to the place of demand,) of whatever the country may need from the cities, in any way connected with agriculture, such as implements, seed, grain, fruit and ornamental trees, and domestic animals of all sorts, except horses. But, considering that as a somewhat delicate operation, in which the most vigilant are sometimes overreached, although professing some judgment in horse flesh, they prefer not to "take the responsibility."

The advantages their agency offers are only those of considerable familiarity with the sources of supply, some judgment and unfailing care in selecting, and a determination to denounce and expose every attempt at wilful imposition, in regard to blood or quality, whether of animal, vegetable, tree, or implement. The cover of "The Plough, the Loom, and the Anvil," already circulating largely through the States, offers a suitable medium for all who may wish to advertise at once, over the whole country; but those who would avail of it must themselves be advertised that they will have to pay in advance, for the use of this medium, at the rate of $5 for a quarter, $10 for a half, and $15 for a whole page, which amount, however, will be afterwards deducted from commissions, in all cases where these amount to $50 or more.

Among other institutions, insurance offices, who wish the people in the country to be informed of the great benefit to be derived from having recourse to such establishments, would perhaps do well thus to make known the advantages they offer to every class and condition of life; of their existence and great public utility towns-people are already apprized, but even there not as generally as they should be. al

WHITMAN'S RAILWAY HORSE-POWER.

THE SUBSCRIBER takes pleasure in returning thanks to the many gentlemen who have favoured him with their MILL-WORK; also to the farmers and planters for their liberal support in the Machine line, and would respectfully inform them, that his endeavors to please will continue unremitting. He is prepared at all times to build any of the following kinds of MILLS. Overshot, Pitch Back, Breast, Undershot, Reacting, Steam, Wind, Tide, Horse-power, or Tread Mills; and having the best of workmen employed at pattern and machine making, he can at all times furnish the best articles at the lowest prices, such as Horsepowers, Pettigrew Shellers, Murray's Shellers, 4 kinds hand and power Shellers, portable Mills adapted to any power, Corn and Cob grinders, Straw, Hay and Fodder Cutters, Carry-log and Mill Screws; also manufactures Hoisting Machines, Hoisting Cranes, Pile Drivers, Turning Lathes and Steam Engines; and any kind of Machine Model or Mill-work built to order. Any kind of Catings and Smith-work at the lowest prices. I warrant all Mills planned and erected by me to operate well. JAS. MURRAY,
Millwright, York near Light st. Baltimore.

Also for sale, Jas. Murray's patent separating Shellers, which shells and puts the corn in perfect order at the same time, for the mill or for shipping—Persons living near the city can bring with them one or two barrels of corn, and give the sheller a fair trial before purchasing.

He has also for sale, the following second hand Machinery: 2 pair 4 ft 6 in. French burr Millstones, with all the gearing; 1 pair 3 ft 6 in. French Burr Millstones, with all the gearing; and some Saw Mill work—the whole are good, and any or all of the above will be sold low. n 1

HALIFAX, N. C., August 25th, '47.

Mr. JAS. MURRAY,—*Dear Sir:*—This is to certify that I have used your fans during the last spring and summer, and feel no hesitation in saying they are the best by far, I ever saw, I fanned with one fan, one thousand barrels of corn in one day—and in one day fanned one thousand bushels of wheat, as it come from the thresher. They will do as much as any two I ever had, in the same time. Yours, &c.
W. B. HATHAWAY.

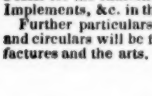
TO THE MECHANICS, MANUFACTURERS, ARTISTS AND OTHERS IN THE UNITED STATES.—The Board of Managers of the *Maryland Institute for the promotion of the Mechanic Arts*, recently established in the city of Baltimore, respectfully announce that they intend holding their first FAIR for the exhibition of improved Machinery, Agricultural Implements, &c. in the month of October next.

Further particulars will be given in future advertisements, and circulars will be forwarded to persons engaged in manufactures and the arts.

J. K. STAPLETON,
GEO. J. ROCHE,
EDWARD NEEDLES, } Com. on Fairs.
ROSS WINANS,
B. S. BENSON,

ADAM DENMEAD, Chairman.
SAM'L. SANDS, Sec'y. Ap. 1

PLOUGHS! PLOUGHS!!



The subscriber is manufacturing Ploughs of various patterns and of different sizes; also Wheat Fans, Cylindrical Straw Cutters, Corn and Tobacco Cultivators, CORN SHELLERS, &c. Also,

THRESHING MACHINES and HORSE POWERS—these latter are used by the following gentlemen, to whom reference is made, as to their superior value, viz. Messrs. T. Beard, Th. Beard, Dr. Watkins, J. T. Hodges, T. Welsh, *W.* Mackall, J. Iglehart, A. Sellman, R. Sellman, *W.* Hopkins, J. Kent, Geo. Wells, Geo. Gale, Dr. Fenwick, A. Franklin, J. C. Weems, of Anne Arundel county; G. *W.* Weems, J. T. Barber, R. B. Chew, *W.* Boswell, Y. Howes, of Calvert co. Md. ☞Agent of Evans Davis, Baltimore co. for sale of the Woodcock Plow.

Pennsylvania Grain Cradles. CHAS. H. DRURY,
Gillingham alley, entrance from Howard st. near Pratt,
mal and store, Hollingsworth st. corner Pratt.

WHITMAN'S AGRICULTURAL WAREHOUSE is now filled with the largest and best selected Stock of FARMING IMPLEMENTS ever offered in the United States. His Premium Prouty & Mear Ploughs and his Premium Cultivator and Gang Ploughs are decidedly the best in use. All who are in want of the best and most approved Implements will do well to give him a call. E. WHITMAN, JR.
mar. 1 Corner of Light and Pratt streets, Baltimore.

TO FARMERS.—The subscriber has on hand three good, strong 4 Horse Powers, which he will sell at $50 each; also a variety of PLOUGHS, small and large, of good patterns and well made, that he will sell below first cost. Likewise, superior THRESHING MACHINES, and various other Farming Implements, equally cheap. Plough Castings on hand at retail. J. S. EASTMAN,
July 1 In the rear of 180 W. Pratt street.

RAVENSWOOD, Accomac, Va., Aug. 4th, 1847.

MR. E. WHITMAN, JR.—During my late harvest, I have fully tested the merits and capacity of your Two Horse Rail way Power and Thresher. As a labor saving machine, performing its work in the most perfect manner, it is invaluable to the farmer. In every particular it has answered my most sanguine expectations—I would not be without it for four times its cost. Indeed, I consider it has already paid for itself; for, without its aid, I could not possibly have availed myself of the high price at which I disposed of my crop During its operation, it was visited by several of the best and most intelligent farmers in the county, who were delighted with its work. With two small mules (entirely too light) and five men and a girl to attend the machine, I threshed four hundred bushels of oats in five hours and twenty minutes, with perfect ease, and without hurrying at all—that was the longest time I operated with it any one day. I have threshed, cleaned, and housed my grain sooner than I have ever been able heretofore to stack it; and without any extra labor. Your Horse Power will be generally adopted in this county—indeed, I may say, that the best lever-power could not be sold here at one-fourth its cost.

I am much pleased with the Straw Cutter you sent,—tho' small, it answers every purpose.

I am yours, with great respect,
WM. H. B. CUSTIS.

We have taken the liberty to publish the above letter for the benefit of Virginia farmers, as the high standing of the author will doubtless satisfy any reasonable mind of the great superiority of my threshing machine over all others.

We are the only person, south of New York, that manufactures and sells this machine.

Price of one-horse power $75, Thresher $45, Band $6 — $126
Two-horse power, $100, Thresher $50, Band $8 — $158

We have also a Sweep Power, that we will warrant to do more work than any other sweep power that is made—stronger and more durable.

Farmers will also please bear in mind, that we manufacture and sell the machines that thrash and clean the wheat at the same operation. E. WHITMAN, Jr.
je 1 Corner of Pratt & Light-st.—Baltimore.

The "Simon pure," and invincible WILEY PLOW still in the field—A. G. MOTT, at No. 38 ENSOR STREET, near the *Bel-Air Market*—Manufacturer and Vender of Implements of Husbandry, viz. *Plows, Harrows, Cultivators, Grain-Cradles, Wheat-Fans, Corn-Shellers, Straw-Cutters*, Endless chain *Horse Powers, Threshing Machines*, &c. &c.—through this medium, would apprize the agricultural community of the fact, that he is the only manufacturer in the "Monumental city" of the GENUINE WILEY PLOW (right and left hand) composed of the real "simon pure" and justly celebrated New York composition, chilled castings, the points of which, are warranted to stand the most rugged soil equal to steel, at a cost of about *two cents* per acre, for blacksmith's bill.—If you are for bargains, call, or send your orders, for he guarantees his implements good as the best, and cheap as the cheapest, for cash, and delivered in any part of the town free of charge.

FENCING—FENCING.—The undersigned is now prepared to furnish the entire apparatus, or any part of the machinery for the manufacture of the new, beautiful, and highly economical kind of FENCING, advertised in the last August No. of this Journal, to such as desire, together with the Patent Right for any of the counties of this State, except that of Frederick, Montgomery, Carroll, Baltimore, and Prince George's—also for the ent re territory of Virginia, or any part of it—likewise for any part of the territory of Pennsylvania unsold. For particulars, description, &c. see the American Farmer, No. 2. for 1847. C. COLEMAN.
Mt. Pleasant, Frederick county, Md., June, 1848.
July 1

LIME.

THE subscribers are prepared to furnish Building and Agriculture Lime at the depot on the Back Basin, corner of Eden & Lancaster streets, which they will warrant to give satisfaction, it being burnt from pure Alum Lime Stone, equal to any found in the United States. Orders may be left with William Robinson, No. 15 Hollingworth st. near Pratt.
ml. FELL & ROBINSON, City Block.

OSAGE ORANGE SEED.—We have received a few gallons of this seed for sale, at $3 per quart. Those wishing to raise this shrub for hedges, should obtain the seed this summer or fall. S. SANDS, Office of the Farmer.
je1 2 Jarvis building, North-st

BONE-DUST AND POUDRETTE.

THE subscribers are prepared to furnish the above named articles of manure, at the shortest notice, at their manufactory on Harris' Creek, Canton, near the Eastern limits of the city. Orders may be left at S. SANDS, Publisher of the American Farmer, No. 2 Jarvis' Building, North-st., Balto.
mar 1. HOSKINS & BAYNES.

HUNGARIAN COWS.—*Mr. Fleischman*, in his paper in the Commissioner of Patents' Report, describes a breed of Cows which he met with at *Murzthal*, in *Hungary* thus:

"This race combines nearly every one, if not every excellence—*abundance of milk, disposition for fattening*, and great strength for draught, and is raised here in its highest perfection. The full blood of this race is characterized by the small shaped head, with broad forehead and broad mouth, short and fine horns, extended body, broad back and handsome neck, high and slender tail of considerable length, fine bluish hair, big udder, and, on the whole, by the stately and soft appearance."

He thus speaks of another race—the

HUNGARIAN OXEN.—"The draught cattle of the manor are supplied from the wild breeding flocks of Hungarian cattle. Among all the horned races of Europe there is none which, with an equally colossal frame, approach so near the speed of the horse, as do the Hungarian oxen. It is a race of cattle, which by dint of their high and stately growth, their long horns, (nearly six feet in length,) their proud and bold look, their broad breast and handsome white color, changing slightly into blue, and lastly, the beautiful proportion of all their limbs, may fairly be pronounced to be one of the most useful and handsome productions of generating nature."

BALTIMORE MARKET—JULY 28.

[There have been several arrivals from Europe, within a few weeks past, the latest of which, the steamer *Europa*, arrived at New York on Thursday, being 3 days latest,—Cotton was firm, and an advance of ⅛d. had taken place—No change in breadstuffs.]

FLOUR.—The receipts of Howard st. Flour have been light and but few dealers have operated to any extent. The sales for the week including 150 sold to-day, will amount to perhaps 500 bbls. new at $5,75. We have no sales of old. Sales of City Mills are making as fast as the millers can grind at $5,75.—The sales of Grain to-day have been very trifling, so much so that we cannot give the prices. We quote as the range of the market at 90a108 cts. for good to prime red, $1,10a1,18 for family wheat. Corn has slightly improved. Sales of white at 43 a 45 cts. and of yellow at 48a50 cts. Sales of Rye at 70 cts. Oats of the new crop sell at 20a25 cts. according to condition, and old at 32a33 cts. PROVISIONS—There is not much doing in barrelled meats. Some sales of Mess Pork at $11a$11.50, and of Prime at $9. Bacon goes off actively at 4¾a5 cts. for Shoulders and Sides, and 7a9¼ cts for Hams. WHISKEY—Sales in hhds. 23 cts. and in bbls. 24½ cents—small supply.

Hogs, live, $4.50a5—Beef Cattle, prices range from $2.25a3 per 100 lbs. on the hoof, equal to 4.50 a5.75 nett, and averaging $2 65—Beef, No. 1, $10.50 a11—Seed, Timothy, retailing at $2.75a3, none strictly prime in market—Herrings, 3 87a4; Shad 6.25; Mackerel, No. 1, $8.25; No. 2, $5.75; No. 3, 4.50—Coffee, Rio, 6a6¼c.—Wood, oak, by the boat load, $2.75a3.25; pine 1.50a2; hickory 3.50a4.50—Coal, stone, $5a5.75—Feathers, 30a33c.—Hemp, lew rot 5¾a6¼c.;—water do. 8a8½c.; Manilla 9a9¼c. per lb.; American dew rots, sales at 5½c.; no Russia in market—Hay, $10a12 per ton, supply good—Molasses, N. O. prime 27c.; P. Rico 23a25; Cuba 13a21 —Tar 1.75a1.87; Rosin $1.70a2.50; Pitch $1a1.35; Spirits Turpentine 35a37; Varnish 21c.—Oil, Sperm 20a1.25, and Spring 1.10a1.15—Plaster, sales 2.50a2.62—Rice, sales at 3.50a3.62—Sugar, Porto Rico, 4a4.70; Cuba 4.15a4.30—Tobacco, is very dull, and no sales more than a hhd. or two at a time, —there are orders to buy, but at prices far below what the article can be obtained for—agents are anxious to sell, but not at prices which will require a sacrifice; we quote Md. 2.50a3; for infer. and com.; $3a3.75 for good common; 5a6 for good; $6a13 for fine and better qualities—common Ohio $3a3.50; good 4.50a6; fine red and wrappery 6.50a$9; fine yellow 9a11, and extra wrappery 10a12—the inspections for the last 3 weeks are, Md. 1345 hhds.; Ohio 303; Kentucky 141; Missouri 15—Total 1804 hhds.

Guano.—Patagonia, or Ichaboe, $45 per ton of 2000 lbs; African $40 do; Chilian, $35 do.

THRASHING MACHINERY, HARVEST TOOLS, &c.

THE subscribers are manufacturing an unusual large assortment of agricultural machinery for the coming harvest —all of which they warrant to be equal as regards plan of construction, durability, &c., to any similar machinery made in this country. They may be rated and priced as follows, viz:

Lever Horse Powers, 3 sizes, at	85 100 and $150
Endless Chain Powers, 2 sizes, at	85 and $110
Thrashing Machines, 4 sizes, at	35 40 50 and $60
Straw Separators for do. 3 sizes, at	15 18 and $20
Grain Cradles, made with iron and wood braces —*extra and common finish*, at	4 and $5
Horse Hay and Grain Rakes, best quality,	$11
Hand Rakes, Hay Forks, Scythe Stones, Sickles, Cradlers, Hammers, &c., also	
Corn and Tobacco Cultivators, made with cast iron and steel tines, price	4, 5 and $6
Corn and Drag Harrows	5 to $16
2 and 3 Furrow Plows—*improved*	5.50 and $6.50
Fanning Mills, with *separating fixtures*, greatly improved	25 30 and $35

We are also manufacturing extensively, our late improved drilling machines, which, with tests during the last season, has proved the article to be perfect in every particular—they are fixed to drill almost every variety of grain, but particularly adapted for wheat.

In the next number of this paper we will say more in regard to this new and valuable machine.

R. SINCLAIR, Jr. & Co.
Manufacturers and Seedsmen,
ju 1 62 Light-st.—Baltimore.

200 THRASHING MACHINES FOR SALE.—E. WHITMAN, Jr., Baltimore, will offer for sale this season one hundred of his Wrought Iron Rail-way Horse Power and Threshing Machines, and one hundred Sweep Horse Powers do. The great demand for those machines, will require orders to be sent early to have machines at the time they may be wanted. E. Whitman, Jr. is the only man in this State, who manufactures the Wrought Iron Rail-way Horse Power and the Thresher, with an Iron Cylinder complete in one piece; and is also the only man who makes the machines to Thrash and Clean at one operation. As Threshing Machines of all kinds and prices can be found at his warehouse from $110 to $220, all who are in want of a machine will do well to give him a call. May 1

HIGHLY IMPROVED HORSE-POWER.—The subscriber is prepared to furnish his improved Horse-Powers, upon the Sun and Planet principle, and such as he exhibited at the late Fair in this city. This power possesses some peculiar advantages over all other powers in use, as running lighter, being more durable, and any repairs necessary to it, can be done on the farm without going to a mechanic's shop. Those in want of a Horse Power would do well to examine this before purchasing elsewhere—price $100. Threshing Machines on hand for $45 and $55. J. S. EASTMAN,
July 1 At his old stand, 180 Pratt-st.

CULTIVATORS.—We have made an improvement in the Cultivator—the object of which is, to let the horse travel in the middle of the row of corn, &c. This is done in a very simple manner, by means of an adjustible draft rod which is moved so that the Cultivator may be run close to the rows—and the horse at the same time travel between them, and thus prevent what often occurs, the treading up of the corn, or so near as to injure the roots. Price, expanding with cast teeth, $5.50; with wrought $6.50. E. WHITMAN, Jr.
May 1. Corner of Light and Pratt-streets.

AGRICULTURAL IMPLEMENTS FOR SALE.

Horse Powers.—Taplin's & Eddy's Circular Horse Powers, Price $75; Wheeler's & Whitman's Endless Chain do, single horse, $75, Double Horse, $100; Trimble's, Warren's & Child's Cast Iron, ditto, $50 to $75.

Grain Threshers.—Wheeler's Thresher at $25, ditto with Separator, $35; Taplin's & Eddy's Thresher, $40; Trimble's & Warren's ditto, $25; Whitman & Pitt's Thresher, with Separator and Cleaner, for one or two horses, $100. Pitt's Thresher, Separator, Cleaner, and Horse Power complete, $200.

Corn Shellers.—Corn Shellers to work by hand or other power. Price $3 to $50.

Straw Cutters.—Straw Cutters of various kinds to work by hand or other power. Price from $3 to $40.

Grain Mills.—Grain Mills to work by hand or other power. Price from 5 to $30. Ditto of Burr Stone, from 50 to $125.

Corn and Cob Crushers.—These grind corn and cobs together. Price 35 to $50.

Spice and Coffee Mills.—Several of these are of a new and superior kind. Price from 2 to $10.

Plows for the South and North.—Superior Plows of various kinds for sod and stubble land, from one-horse to six-horse draft. Also, the Scotch Iron, Centre Draft, Self-Sharpening, Side Hill, Wet Meadow, Double Mould Board, Paring and Subsoil Plows, with common or patent dial clevis. Price from 2 to $20. The woods of the above plows are of choice white oak, and got out by patent machinery; the castings are of the best kind.

Also, a complete assortment of all kinds of Agricultural and Horticultural Implements, Field and Garden Seeds.

A. B. ALLEN & CO.,
a1 2t 189 and 191 Water street, New York.

IMPROVED STOCK.

A FULL-BRED DURHAM SHORT-HORN BULL, seven years old; and a few high-bred Southdown ram LAMBS, for sale. SAMUEL HAMBLETON,
July 28, 1848. * Near St. Michaels, Md.

SUPERIOR GUANO FOR SALE.

JUST received and for sale, in lots to suit purchasers, a cargo of GUANO, of superior quality. Price $35 per ton, for half a ton or more; less than half a ton, 2 cts. per lb. Apply at the New York Agricultural Warehouse and Seed Store, Nos. 189 and 191 Water street, New York.
a1 2t A. B. ALLEN & CO.

GUANO.—GUANO.

150 TONS of superior quality just received and for sale in lots to suit purchasers, by
T. W. & L. LEVERING,
114 Pratt-st. Wharf,—Baltimore.
Who have in store CLOVER, TIMOTHY, ORCHARD, and HERDS GRASS SEED. aug. 1-1t*

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